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ADOLESCENCE AND HIGH-SCHOOL PROBLEMS

BY

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WITH INTRODUCTION BY

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PREFACE

This book had its origin in a course which was organized a few years ago for prospective high-school teachers and principals. The author taught the course to an increasing number of students in the Teachers College of the Illinois State Normal University; and the material here presented continues to meet the interests and needs of the class of students for whom it was planned.

The discussions offered are not the result of original investigations in the field of secondary education. The aim has been to produce a book that will be helpful to any one who expects to do high-school work and to all others who are responsible for the welfare of adolescents. The table of contents shows that, while there has been no attempt at completeness, the subjects chosen for treatment include such matters as all experienced workers in the field of secondary education will recognize as vital. It is hoped that the book will be of practical rather than theoretical interest. The author has always had in mind real boys and girls and concrete situations. The book is based on more than twenty years' experience as principal of public high schools and nine years in training young men and women for high-school positions. The experience and observation of many writers and co-workers have been drawn upon with freedom, but constant acknowledgment is not deemed practical.

The plan of the book is simple: it attempts to describe the nature of boys and girls of high-school age; then, in the light of this knowledge of adolescence, it seeks solutions for various problems growing out of high-school teaching and management. No attempt is made to deal with teaching problems as such. In all the discussions, it is assumed that the *development* of

the youth, rather than what he *expects to do*, furnishes the safest and most practical basis for the selection of educational material and the determination of educational methods. It would seem that both the new psychology and the new sociology teach us that, while giving attention to the future of our high-school pupils, we should not neglect their present interests and needs, and that the only way to give them training in general social efficiency is through specific, concrete practice. It is hoped that there is always manifest in these discussions "democratic respect for the individual;" to miss this would be to lose sight of one of the most significant teachings of the psychology of adolescence.

The reader will find each chapter complete in itself; but there has been a serious attempt to secure a real unity throughout the book. This unity it is hoped is brought about by the maintenance of the viewpoint already described.

It must be admitted that the one who at present publishes anything on certain phases of secondary education is guilty of considerable temerity. Educational ideals are ever changing; but the present is understood by all students of education to be a period profoundly transitional. The social and economic unrest of the years immediately preceding the great war, together with many other causes, greatly disturbed the educational thinking of the country and occasionally the practice; and the war, with its exposures and consequences, has still further troubled the educational waters. Moreover, it is in the field of secondary education especially that new policies are manifest and a fundamental reorganization is already in progress.

If we are to judge by the utterances of the more advanced thinkers, the high-school curriculum is little more than a flux, and many of the traditional methods are either being seriously questioned or wholly rejected. In the present instance, however, there may be comfort in the thought that, although

educational theories are rapidly changing (like the individual adolescent), yet, as a race phenomenon, adolescence tomorrow will in all essentials be like the adolescence of today; hence, if the conclusions drawn from studies of this interesting and baffling period are logical, the following chapters will not immediately become antiquated. Of at least one thing the author feels certain: much that is here recommended will meet with the approval of many high-school boys and girls.

The reader, as well as myself, is under obligation to my wife, Lillian Smith Pringle, for her careful reading of the proof, her many helpful suggestions, and her encouraging interest in the success of this book.

The book is dedicated to all who are youthful in spirit and enter sympathetically and enthusiastically into the work and play of those in whose interest it has been written and to all who believe that the joyous days of youth are rich in possibilities for future manhood and womanhood.

NORMAL, ILL., 1922.

CONTENTS

INTRODUCTION

CHAPTER	PAGE
I. METHODS OF SOLVING EDUCATIONAL PROBLEMS. .	I
Solution of educational problems — psychological and sociological; relative value of two methods; progress in secondary education; function of adolescent psychology; understanding of youth; social administration; plan of the book.	
II. PREADOLESCENCE.	7
Periods of human development; preadolescence a natural approach to adolescence; physical characteristics; mental traits; social characteristics; gang life; fads; games; non-social proclivities; sex; morality; personality; savagery; recapitulation theory; practical conclusions; health; stories and traditions; outdoor nature; methods; twofold life.	
PART I — PSYCHOLOGY OF ADOLESCENCE	
III. GENERAL SURVEY.	22
Significance of adolescence; adolescence and primitive peoples; Romans; knighthood; churches; literature and art; formative period; difficulties and dangers in study of adolescence; questionnaire method; "new birth;" series of crises; personality; stages of development — early, middle, late adolescence.	
IV. PHYSIOLOGICAL CHANGES AND CHARACTERISTICS	40
Maturing of sex functions; signs of adolescence; growth — height, weight, bones, muscles, heart, lungs, brain; health; breathing and voice; diet; science and common-sense.	

CHAPTER	PAGE
V. MENTAL GROWTH AND RECONSTRUCTION.....	58
Physical maturity and mental growth; new attitudes; sexual life; sex characters; charms and fetishes, migratory instincts; development of senses; love; thought awakening, reverie; practical conclusions.	
VI. SOCIAL CHARACTERISTICS AND THEIR IMPORT...	88
Social environment; adolescents hetero-centric; social instincts — gregariousness, sympathy, love of approbation, altruism; personality; social efficiency; social conformity.	
VII. MORAL ASPECTS.....	98
Adolescent a moral being; new wildness; moral differences; unrest; criminal out-croppings; antisocial acts — adventures, truancy, incorrigibility, anger, fighting, cruelty, stealing, lying; commercialization of adolescent nature; ideals — origin, nature, struggle; moral evolution; personal influence.	
PART II — HIGH-SCHOOL PROBLEMS	
VIII. TRANSITION TO THE SECONDARY SCHOOL — JUNIOR HIGH SCHOOL.....	126
(i) Problem and its solution; (ii) psychological basis of junior high school; (iii) history of movement; (iv) definition, determined by nature of early adolescent; (v) curriculum, subject-matter, methods, propositions concerning curriculum, curriculum making, program of studies; (vi) methods; (vii) teachers; (viii) organization, administration, cost; (ix) building, equipment, text-books; (x) functions.	
IX. THE AMERICAN HIGH-SCHOOL GROUP.....	168
Heterogeneous nature; growth; social status; expectations of pupils; age; general intelligence; advisory system; conferences; supervised study.	

CHAPTER	PAGE
X. THE CURRICULUM.....	177
(i) Curriculum the storm center, curriculum making, shifting ideals, no ideal curriculum; (ii) qualifications of curriculum maker; (iii) purpose, scope, function, responsibility; (iv) forces leading to curriculum changes, new definitions, the trend; (v) general principles of curriculum making; (vi) individual natures, social outlook, Committee of Ten, a rich and changing curriculum, selective devices, history of curriculum, the curriculum system, majors, minors, constants; (vii) type curriculums, curriculum differentiation; (viii) administration, curriculum thinking.	
XI. SOCIAL ACTIVITIES.....	213
Functions; social education; organizing tendencies; three policies of faculty; two demands; leadership, coöperation, loyalty, moral training; pleasure; habits; faculty adviser; organizations; dancing, dramatics; credits.	
XII. LITERARY SOCIETIES.....	232
Forms of expression; functions; extemporaneous speaking; subjects; learning to speak; organization.	
XIII. DEBATING.....	248
(i) Brain development, new instincts and powers, dangers in debating; (ii) management, reasoning power, initiative, judgment, poise, concentration, meaning of proof, fair play, leadership, coöperation, effort required; (iii) faculty adviser, debating clubs, instruction; (iv) interschool debating, regulations, benefits.	
XIV. HIGH-SCHOOL JOURNALISM	268
Effort necessary; functions; benefits; problems; staff; faculty adviser; difficulties; responsibility.	

CHAPTER	PAGE
XV. ATHLETICS	277
(i) Necessary, attitudes of faculty; (ii) psychology, influence of athletics, adolescence and athletics; (iii) evils and dangers not inherent; (iv) coaching, faculty coöperation; (v) suitable high-school games; (vi) management, principal's duties, scientific demands.	
XVI. PUPIL FINANCE	302
Business training; temptations of adolescents; a plan and its workings.	
XVII. ASSEMBLY	307
<i>Esprit de corps</i> ; demands of assembly programs — interesting, instructive, inspiring; a social affair; coöperation; illustrations; time and length of period.	
XVIII. SEX EDUCATION	317
Difficult and delicate subject; purpose of chapter; dangers; normal life processes emphasized; methods of appeal; timing instruction; preadolescence; the teacher; the information needed; knowledge not enough; methods; school's responsibility.	
XIX. MORAL EDUCATION	335
Sex and morality; morality and adolescence; teaching morality; psychological and social aspects; conscience; imagination; social origin of morals; conditions; subconscious self; no spiritual gifts; life and character; moral ideas and ideas about morality; social-psychological treatment; incidental instruction; rules; punishments; school studies; moral education.	
XX. PRINCIPLES AND METHODS OF APPEAL	352
Knowledge of human nature; (1) appreciation; (2) square deal; (3) honor and "honor systems;" (4) adolescent code of honor; (5) unity of the individual; (6) spirit of democracy; (7) freedom; (8) conduct and character; (9) loyalty as a motive — strongest, safest, and most effective; application; personal leadership.	

INTRODUCTION

In 1840, the average citizen of this country received only 208 days of schooling. In 1870, he received about 582 days, and at the present time he receives something over 1200 days of schooling. This change has come about because the problems of each succeeding generation have become more numerous, more complex, and more difficult of solution than those of preceding generation. Life was simple and its problems easy of solution in 1840. In that day and generation there was no discussion of capital and labor problems, of marketing, of subsidizing a merchant marine. There were few urban problems. One seldom heard any discussion about pure foods, the congestion in the great cities, child labor legislation. Certainly, there was no talk about the movies or the rights for radio broadcasting. Year after year and decade after decade, society has grown more intricate and its organization more complex. The natural concomitant of this increasing intricacy and complexity has been an almost overwhelming number of problems, the solution of which requires a higher trained intelligence. As a consequence, the general level of trained intelligence among all the people has been raised generation after generation. The very safety and perpetuity of democracy has depended upon this.

In the earlier days, the high school was regarded as a college preparatory school. It is no longer so. Its program has been enlarged and its curriculum enriched. It ministers to almost every type of mind and to every class of society. In 1890, a large share, in fact something like 90 per cent of the graduates of our high schools, attended colleges and universities; to-day only a minority of high school graduates do so, yet the registration in these higher institutions is constantly increasing because the

number of high schools and the number of students in them are increasing. The high schools have, to a certain extent, become finishing schools for large numbers of students. They are no longer essentially cultural in character. Courses more truly social in nature and with an industrial and vocational flavoring have gradually found their way into the secondary school curriculum, in response to public pressures and public demands. The modern high school provides training for those with a scientific turn of mind as well as for those with an artistic turn of mind, for men in industry as well as for a noble use of one's leisure, for women as well as for men.

The emphasis upon secondary school problems has been gradually shifting from outside to inside agencies. With the expansion of the secondary school curriculum, the raising of the compulsory law age, and the increasing popularity of the high schools, the problem of inducing students to attend has become less and less acute. On the other hand, the internal problems have become more acute. To-day every student of secondary education views the field from two angles: first, from the types of outcome that the school should attempt to secure; second, from the characteristics of the types of mind to be ministered to. Neither the outcomes nor the types of mind are static. They cannot be disposed of once for all. If they could, then society itself would be dull and uninteresting and static; but they do determine the nature and character of the organization of the curriculum and of the instruction.

The limitations of human nature as well as its strengths furnish the basis for the technique of secondary education; the pressures and sanctions of social life determine the content of the curriculum. The teacher, who is the primary agent in the process, must keep constantly in mind the fact that the individual is becoming adjusted to the world outside by being adjusted to a constantly enlarging series of worlds inside the school. The school is a social institution set aside, not merely to save

time and labor, but to bring socially serviceable materials face to face with the person being educated; it is the place where he will catch larger and larger glimpses of the world beyond in which he is to live and work. Not everything that he studies will be immediately useful, and not everything will be mastered without effort, but values of life and the principles of learning will never be lost sight of by the competent teacher.

One of the great dangers which the secondary school suffers is that its materials of instruction may be so intellectualized when they fall into the hands of teachers that they will be taught as an end and not as a means. That danger is clearly understood by the author of this text. It will be observed in the second part of the text, where he discusses high-school problems, that there are chapters devoted to social activities, literary societies, debating, high school journalism, athletics, high school finance, the school assembly, sex education, and moral education. In other words, he maintains that everything the student does, every experience he has, every relation he establishes, every contact he makes, has its educational implications, and rightly so. There is no period of life where these contacts and relations are more important than the secondary school period. This period has been described as the critical period, as the time of storm and stress. It is a time of great physical and psychical changes, the importance of which to education has never been clearly understood.

Books have been written on the psychology of adolescence, and books have been written on the social aspects of secondary education, but very few attempts have been made to relate these two sets of facts in a concrete educational scheme. That has been done in this book in a most sympathetic and rational way.

LOTUS D. COFFMAN

UNIVERSITY OF MINNESOTA,

May 16, 1922.

ADOLESCENCE AND HIGH-SCHOOL PROBLEMS

INTRODUCTION

CHAPTER I

METHODS OF SOLVING EDUCATIONAL PROBLEMS

There are two ways of determining educational procedure concerning questions of either method or material. One is by a careful study of the nature and personal needs of the one to be educated; the other is by focusing attention upon the economic and social outlook of the one to be educated. According to the first, when methods of teaching, school administration, and management of social activities are under consideration, or when the content of the curriculum is in question, we concentrate upon the pupils, and, by a scientific and sympathetic study of their physical, mental, social, and moral characteristics, try to determine what method and what subject-matter will most strongly appeal to their interests and most closely fit their needs; this is the psychological mode of attacking educational problems. According to the second way, when matters pertaining to method and content are to be settled, we turn our thoughts toward the community from which the pupils come and to which they will return, and, by a close and exhaustive study of its nature and needs, attempt to learn what social and industrial services it will demand of the pupils when they leave school; this is the sociological mode of solving edu-

cational problems. The first method of solution, when applied to high-school problems, trusts our increasing knowledge of adolescence; and the second depends upon our tightening grasp of the fundamental principles of social economy. The first is dominated by reverence for the individual's tastes and talents, the second makes the requirements of the civilization into which the individual was born the determining factors. One method exalts individuality as the end toward which all educational efforts must tend, the other glorifies the composite spirit of society and makes its needs the end.

Both of these methods of solving educational problems are considered scientific and modern. Each has its disciples, and the influence of one or both is traceable in all recent educational writing and discussion. Just now it would appear that the demands of society, in the broader sense of the term, are uppermost in the minds of a majority of educational experts; as witness, the ever recurring phrase "social efficiency" and its like, in which it would seem that this proposed aim of education implies that the schools are to make the pupils efficient for the sake of society. However, the relative merits and validity of these two ways of determining educational procedure are not under discussion here. Whatever may be their relative values as criteria, the discussions and attempted solutions of high-school problems which follow are controlled largely by psychological considerations. These will certainly furnish workable and valid tests; if a single viewpoint is maintained, our study of the problems here considered will gain in unity.

There is little doubt that thus far child psychology has influenced the pedagogy of the elementary school much more profoundly than adolescent psychology has modified secondary education. For this state of affairs there are at least two reasons: first, the psychology of adolescence, although concerned with the most interesting and formative phase of human development, is not yet so definitely formulated as the psychology

of childhood, there being the utmost variance of opinion and emphasis on many important points respecting adolescent nature, due partly, as we shall see, to the inherent difficulty of the subject, and partly to the methods of study which have prevailed; second, the field of modern secondary education has not yet been so thoroughly worked as that of elementary education, the latter having long possessed a considerable body of experimentally determined pedagogical principles, which have been fairly well confirmed by practice. In secondary education the pedagogical outlook is unsettled and the lines are still shifting, due, it seems to the author, to the lack of a psychological basis. From the very nature of the case, much light will be thrown on all high-school problems when we have reliable information concerning the nature of youth; it seems to be a fundamental principle in our thinking to judge the needs of any institution or individual by its nature, by the laws of its being; our remarkable success in dealing with plants and the lower animals has come from an intimate knowledge in each case of their life history. There is full agreement that the school is for the pupil, then let us study the pupil, and by so doing make the school deal with him according to his nature and needs.

The question as to what extent the study of psychology functions in the work of the teacher and school administrator has often been discussed. The answer to the question would seem to depend upon what phase of psychology is meant and what methods of study are employed. If the attention is focused largely on the abstract principles of the subject, and the methods are deductive and introspective, perhaps little direct help will result. But this is not what is now meant by the study of psychology in the modern schools of education. Educational psychology is now applying the principle of division of labor, with a view to securing the most direct and first-hand knowledge possible concerning each period of child and adolescent develop-

ment. Any one who has year after year had the privilege of seeing successive groups of adolescent boys and girls, in their intercourse with each other and their grappling with the usual intellectual demands of high-school work, show forth the same characteristics and stages of development as their predecessors, comes to realize that he is in the presence of laws that must be universal and worthy of his serious attention. If this observation of the social and mental life of adolescents is close and sympathetic, and if it is supplemented by all the skill and methods of research known to modern science, there surely will result a body of knowledge and an attitude of mind on the part of the observer that will greatly aid him in his solution of the many urgent high-school problems. [A persistent effort by every available means to understand this rapidly changing period will naturally give rise to a deep interest and a keen alertness that must prove most helpful in discovering individual differences and needs as well as group characteristics and requirements. The student of adolescent nature soon becomes aware of the close relation and interaction between individual life in its integrity of development and social life, which is so necessary to this individual development; without this knowledge and the consequent insight, one would be helpless in dealing with many of the social problems involved in the management of a really modern high school; and one who knows youth is conscious of a fortunate and helpful concurrence between the demands and ideals of the individual and of the social life.] Moreover, of the evolving of new theories, the proposing of new subjects for the curriculum, and the devising of new methods there is no end; the conscientious student of secondary education is much in need of safe criteria by which to judge the educational novelties as they appear. J. J. Findlay, one of the highest educational authorities in England, says, "Let no one suppose that the study of adolescence can be left out of account in judging of the worth of current systems of secondary education."

However, it must not be expected that a knowledge of adolescence will furnish ready-made rules of procedure; there must come between this knowledge and the successful management of youth the intervention of an inventive and sympathetic mind. As the late Professor Royce of Harvard pointed out many years ago, the greatest benefit that will come from such study is the psychological spirit and habit of mind, which lead to a constant and intelligent observation of the mental and social life of the pupils and a scientific reasoning from the data thus obtained. The whole on-rushing life of youth should supply the most reliable commentary on the many high-school problems as they arise.

The problems connected with high-school teaching and management have been variously classified. There is a class of problems that are practically peculiar to the modern high school, which may be called problems in "social administration;" they have come into prominence through our better knowledge of the close relation between the social life of the adolescent and his mental and moral life, and consequently through the growing conviction that secondary education in the last analysis is a social enterprise. These problems have arisen in connection with the social aspects of the curriculum and its administration and with the many and varied social activities of the modern high school. They are neither teaching nor administrative problems in the broadest sense; but they are vital problems, for they have to do with the individual and social *life* of every pupil, and on their wise solution will depend in a large measure the degree of social efficiency with which we are able to endow our pupils. Like other problems, their solution should be based on scientific knowledge; that is, their solution should rest on the fundamental facts thus far ascertained and the underlying principles thus far evolved concerning the nature of adolescence. This means, of course, parting company, as far as may be, with dogma and many traditions and customs; and

this in itself is a peculiar and often difficult process, for many worthy intellectual and humanitarian movements have left their impress on secondary education. However, the leaders of educational thought are generally of the opinion that the feeling of unrest concerning all phases of high-school activity should be interpreted as a call to advance along all lines; Dr. Judd believes that "the time is ripe to essay the comprehensive task" of applying psychology to "all high-school problems," particularly the special psychology of adolescence.

The foregoing statements suggest the plan of this book. The chapters included in Part I furnish a brief and somewhat complete account of what is now generally believed concerning the psychology of adolescence; Part II is an attempt to deal with various important high-school problems, mostly of a social nature, *in the light of* our knowledge of adolescence. The assumption is that the psychology of the special problem in each case is based upon and merged into the psychology of the pupils.

CHAPTER II

PREADOLESCENCE

Even a cursory survey of the entire life history of any individual makes us aware of how greatly the different periods of life differ from one another. It is true that we expect to find the later stretches of life's span more quiescent, more static, comparatively fixed and settled; even ten years at this end of life may seemingly bring slight change of any kind. But, when we turn our attention to the other periods of the individual's growth and development, we find all is changing and changing so rapidly that at times it appears almost impossible to fix upon any definite characteristics and say that these constitute the real individual under consideration; all is flux; physical features take on new shape and proportions, and the mental and moral movements are so rapid that we have at times little less than continuous turmoil. All here is dynamic. The countless currents of life are setting, and the full nature and trend of the complex stream is not yet determined.

Since so much of this book is devoted to one of these rapidly developing periods of life, it will be advantageous to try to give this period a setting. It will be helpful to pause and focus attention for a short time upon that most interesting and unique period just preceding adolescence. This will form a natural and helpful approach to our study of adolescence; the purpose of this chapter, therefore, is to give a brief account of the characteristics, tendencies, and educational possibilities of that period of childhood extending from the ages of eight or nine to twelve and known generally as preadolescence. Joseph Lee has well named it the Big Injun Age.

This period of childhood is characterized by the greatest physical activities, and these activities are the most varied; the waking moments are filled with almost continuous movement, and wiggling seems to be the law of living. Health is about at its best. Physical growth is slower now than at any other time during the first eighteen or twenty years; beginning with birth, the rate of growth rapidly decreases until preadolescence, when it sometimes almost stops. Thus it is a period of much stability, due in part at least to relative balance between assimilation and expenditure; and it is a time when the individual shows nearly perfect adaptation to environment. The boys and girls are now able to resist all kinds of unfavorable conditions; their power of endurance is great; both boys and girls are at the height of their physical buoyancy; and vitality according to all tests runs high. And, strange to say, although not fully developed, the brain reaches at the end of this period nearly its full size and weight. Thus we have during this period of preadolescence a being wonderfully efficient, when judged on a purely physical basis, perhaps more nearly perfect in the way it functions and rapidly adjusts itself to new conditions than at any other time of life.

The story on the mental side is also interesting. The power of perception is remarkably acute; and the child, especially the boy, is so bent on using this power that books are readily put aside and reading often becomes very distasteful. At this time the poet's injunction, "away to the fields," meets with eager response. A boy sometimes can take you to a hundred birds' nests, and of these he has a more intimate and vital knowledge than many a bookworm has of his books. A study of this period shows that memory is quick, the percentage of error is small, and facts and impressions are lasting. As distinguished from the previous four years of the child's life, it is an age of prose. The preadolescent is not interested in fairies or their doings; and the many make-believe activities of the previous

dramatic period are suddenly and vigorously put aside. The automatic powers are at their best, the reactions are immediate. [Thus it is the golden age for drill and discipline.]

It is well to note that the elements of knowledge, which the preadolescent so rapidly and willingly acquires, are more or less without content to him while he is acquiring them, with the important exception of what he gets from outdoor nature and what comes to him in the form of suitable story.

Although he is not at all poetical, his visual imagination is vivid and grasps its object firmly. Reason is only slightly developed, in many cases little more than foreshadowed. Real insight and understanding in the narrow sense are only beginning. The preadolescent gets much pleasure from collecting all kinds of objects (many of them entirely useless) and swapping them with other collectors of his kind. The collecting is rarely in any sense scientific, but seems to be done merely to satisfy the desire for possession; all observers are familiar with the bulging pockets of the grammar-school boy. The interest in these collections and the value placed upon them are both, of course, very transient. The interest of the child in mechanical puzzles culminates at about eleven years. [Thus the mental life of the preadolescent is lived on a concrete basis; he is interested in things tangible and deals successfully with them if he finds them in his immediate environment. Much of this success is doubtless due to his ready power of imitation; girls are more imitative and are less general in their interests than boys.]

Much of the preadolescent's keen objective interest doubtless arises from the feeling that he must "bang himself up against the world," as some one has expressed it, "and see what it and he himself is made of;" in fact it is the only way he can gain a knowledge of himself and his surroundings, and knowledge he must have. Moreover, he is satisfied if he can learn merely how the world runs; later he will philosophize about the run-

ning; now the facts are sufficient, later he will demand the theories which organize the facts.

The social characteristics of this period differ in a very marked way from the period that follows. Life at this time is naturally and decidedly individualistic. The preadolescent is ego-centric, always looking out for "number one;" he is likely to be unsympathetic and regardless of others; with him self-preservation is, indeed, the first law of nature. The altruistic symptoms which he may show are, when really understood, largely imitative. It is true that the preadolescent develops a life of his own outside of the home circle. His social tendencies are shown in the formation of the gang, in his adherence to its laws, and in conforming to its spirit. But in all this he is really self-centered; gang life and spirit appeal to him because of what they bring to him in personal satisfaction; and one gang is readily and unsentimentally exchanged for another when circumstances favor. This is the tribal period of boyhood and the gang is a primitive democracy, whose principles and purposes must be observed by the members; and, although his membership is readily transferred to another gang, the boy is remarkably loyal to the interests and purposes of the gang as long as these obtain. The educative influences of the gang are indispensable to virile development; it is here that the boy gains the masculine viewpoint, which he cannot easily get from his home life, at least not from his nurse or mother; here to a certain degree his selfishness will be mitigated, when the give-and-take methods and customs of this tribal institution are brought to bear upon his natural egotism; it is very wholesome and necessary to learn through pretty lively contact the personal values and talents of other boys.

The tendency to indulge in short-lived fads and the strength of mere gang spirit are vividly portrayed in Robert Louis Stevenson's account of the "Lantern-Bearers;" the interest and

value, as illustrative of our theme, are sufficient to warrant quoting certain passages from this delightful essay.

"Toward the end of September, when school time was drawing near, and the nights were already black, we would begin to sally from our respective villas, each equipped with a tin bull's-eye lantern. The thing was so well known that it had worn a rut in the commerce of Great Britain; and the grocers, about the due time, began to garnish their windows with our particular brand of luminary. We wore them buckled to the waist upon a cricket belt, and over them, such was the rigor of the game, a buttoned top-coat. They smelled noisomely of blistered tin. They never burned aright, though they would always burn our fingers. Their use was naught, the pleasure of them merely fanciful, and yet a boy with a bull's-eye under his top-coat asked for nothing more. The fishermen used lanterns about their boats, and it was from them, I suppose, that we had got the hint; but theirs were not bull's-eyes, nor did we ever play at being fishermen. The police carried them at their belts, and we had plainly copied them in that; yet we did not pretend to be policemen. Burglars, indeed, we may have had some haunting thought of; and we had certainly an eye to past ages when lanterns were more common, and to certain story-books in which we had found them to figure very largely. But take it for all in all, the pleasure of the thing was substantive; and to be a boy with a bull's-eye under his top-coat was good enough for us.

"When two of these asses met, there would be an anxious 'Have you got your lantern?' and a gratified 'Yes!' That was the shibboleth, and very needful, too; for, as it was the rule to keep our glory contained, none could recognize a lantern-bearer unless (like the polecat) by the smell. Four or five would sometimes climb into the belly of a ten-man lugger, with nothing but the thwarts above them,—for the cabin was usually locked,—or choose out some hollow of the links where the

wind might whistle overhead. Then the coats would be unbuttoned, and the bull's-eyes discovered; and the chequering glimmer, under the huge, windy hall of night, and cheered by a rich steam of toasting tinware, these fortunate young gentlemen would crouch together in the cold sand of the links, or on scaly bilges of the fishing-boat, and delight them with inappropriate talk. Woe is me that I cannot give some specimens! . . . But the talk was but a condiment, and these gatherings themselves only accidents in the career of the lantern-bearer."

Stevenson goes on to say that the boys were very cold, spat upon by flurries of rain, and drearily surrounded; and their talk was silly and indecent. "To the eye of the observer they *are* wet and cold and drearily surrounded; but ask themselves, and they are in the heaven of a recondite pleasure, the ground of which is an ill-smelling lantern."

These paragraphs from Stevenson describe with spirit and sympathy several boyhood characteristics and joys. From the sketch we understand that the preadolescent revels in the life and the mysterious joys of his gang; we are made to feel the satisfaction which comes to him from some worthless possession held in esteem by his congenial comrades; we learn of his tendency to imitate and take suggestions from his immediate surroundings, and of the influence which naturally comes to him from certain story-books suitable to his needs; we are reminded of his disregard for external discomfort if his purposes are being fulfilled; and withal we are not allowed to forget his proneness to silly and vulgar talk. Only a man who was once a real boy and retained undimmed the memory of his boyhood feelings and experiences could give us this vivid picture of the gang and its life.

A study of the games played during this period throws much light on the social characteristics. These are mostly individualistic and competitive; it is only toward the end of the period that truly coöperative games begin to make their appeal; the

games must give opportunity for displaying individual feats. Girls are less interested in coöperative games than boys; they are more attracted by games involving imitation and chance. Because of its connection with the recapitulation theory, it is significant to note that the interest in the universal game of hide-and-seek culminates at ten, then suddenly drops.

The simply organized clubs and societies, which the preadolescent enjoys for a brief time, are usually for athletics, for adventure, or for predatory purposes, and all prompted by the urgent demand for sensori-motor activity. All clubs and organizations of this time are especially lacking in stability, unless their welfare is carefully guarded by an adult who understands the nature and the needs of their members; this one might expect from the self-centered and self-assertive nature of preadolescents; misunderstandings and quarrels are almost inevitable.

The non-social proclivities of this period are often exhibited in a marked way by the almost utter indifference to personal appearance; a dirty face and uncombed hair do not usually disturb the prevailing happiness of this interesting young barbarian, for he is living out a period of the race's history when personal comfort and welfare controlled more than personal appearance. He does not care very much what the rest of the world thinks of him. Here follows the vigorous statement of Prof. George H. Palmer: —

“The child is charmingly self-centered. The world and its ordered goings he notices merely as ministering to his desires. Nothing but what he wishes, and wishes just now, is important. He relates all this but little to the wishes of other people, to the inherent fixities of things, to his own future states, to whether one wish is compatible with another. His immediate mood is everything. Of any difference between what is whimsical or momentary and what is rational and permanent he is oblivious.”

The preadolescent is fundamentally most unlike the adolescent in his slight appreciation of sexual difference; this differ-

ence appears to have little significance, except that each generally prefers to associate with his own sex; and in the case of the boy he seems sometimes rather to despise the girls of his own age. At any rate, if the girls and boys join in games or contests, it must be on an equal footing, and respect for the opposite sex will come only from proven skill or agility of some kind. Two or three years later all this is changed; sex consciousness will be apparent in all social arrangements.

The preadolescent is neither moral nor immoral in the true sense of these terms; he may be better described as unmoral; at least, his moral ideals are negative rather than positive; much of his seeming morality results from imitation or habit; thus it appears he is devoid of true morality. The boy whose habitual conduct is such that people say, "What a good child!" is not unlike a well trained animal; he has learned in a somewhat mechanical way to live a life of inhibitions (which, by the way, is very unnatural to a healthy, normal boy); the moral ideas which he appears to embody have not been woven into the web of his life; he has simply learned well his parts and he does not mistake his cues. It is only after he enters adolescence that he develops that sense of values which makes possible truly moral living. Since the values are determined largely by the effect of conduct on other people, he has little means of acquiring a sense of them; for, as we have seen, it is not in his nature to think much about other people.

Unless the preadolescent is naturally of a passive and timid disposition and has yielded more or less completely to the moral code which well-meaning parents and teachers have thrust upon him, and thus does his moral tricks successfully, we are all aware that there are trying times awaiting those who are responsible for his conduct and welfare. There is a crassness, a selfishness, and a thoughtlessness peculiar to this age between childhood and youth, which, unless it is sympathetically recognized and understood, may be extremely annoying; but

few need be told this, for the youngster of the age under consideration seems, by reason of his insatiable curiosity and his persistent assertiveness, to be everywhere present. All this frequently applies to girls as well as boys. One pleasing young lady of nineteen speaks of herself as follows: "During the self-assertive period I must have been a distinctly obnoxious youngster. I knew it all, I wanted to do what the boys did, I was noisy, slangy, and rude. This always surprises me in retrospect, for on the whole I think I was a rather quiet and sensitive child. But at that time nothing was worth while but muscle, endurance, speed, perfection of body in all sorts of tests of prowess and skill."

The elements of the preadolescent's personality are his largely by inheritance; although few in number, they are well organized on a simple plan, have much momentum, and are effective. The primitive elements of personality are easily distinguishable from the later elements developed during adolescence, which are much further-reaching and more subtle. His sympathy, capacity for loving, as well as his faculty for esthetic enjoyment, are but slightly developed. Real sentiment and true religion are best described as nascent. But we must not expect to find in the budding religion, which may appear at this time, anything closely equivalent to what we call religion in the adult; in this, as in other matters, we cannot successfully transplant our adult variety.

The boy from eight to twelve delights, when the opportunity is given, in all forms of savagery, hunting, fishing, roving, and fighting; tribal and predatory proclivities are sometimes very marked. And we must be neither surprised nor discouraged if we discover considerable barbaric cruelty in the individual who is now living over again the barbarism of his race. It is certainly unfortunate both for the happiness of the boy and the welfare of the future man when the deep-seated instincts that prompt him to revel in idleness and savagery are not allowed

some free scope. Rousseau understood the preadolescent and stated his case vigorously when he urged that he be left to his natural impulses, a recommendation rather inconvenient under modern conditions for the adults with whom our young tribesman chances to be associated. Whatever we may think of Rousseau's advice, there is the utmost certainty that we cannot wisely attempt to make "nice little men out of noisy, boisterous boys."

Moreover, our young brave spends little time considering the ulterior motives of the people around him; on the other hand, he judges action by actual results, and especially by the way it affects him and his happiness; he is incapable of the fine discriminations in these matters which are so characteristic of the adolescent; "the present only touches" him.

For generations immemorial, teachers, mothers, and maiden aunts, as well as men (who ought to understand) have been wont to ask why boys need to act so, why they are so rude, so noisy, so blustering, so cruel, so disagreeable generally. These questions and their like can be answered in three words if technical terms are allowed. "Ontogenesis recapitulates phylogenesis." This is Heckel's scientific way of saying that the individual during his life repeats the history of his race. This is sometimes known as the "recapitulation" theory; and sometimes it is referred to as the "culture epochs" theory. No one doubts that mankind has had a long and strange struggle in its progress from savagery up to civilization; but it is only in recent years that we have come to recognize the same struggle going on in the individual. The racial prototypes of the different periods of the individual are classified as pre-historic, patriarchal, tribal, feudal with absolute monarchy, revolutionary with constitutional monarchy, and republic or self-governing. The parallels to these periods have been pretty carefully identified in the individual and are respectively, infancy, childhood, preadolescence (boyhood), early adolescence, middle adolescence,

and late adolescence. Thus we have a simple answer to the questions concerning boyhood, which have so long troubled fond parents and teachers; the boy has inherited the instincts, the feelings, and the experiences of primitive man, and is rapidly repeating in his way the stages of progress through which his uncultured and barbaric ancestors have passed. Why should he not revel in the comradeship and rough-house activities of the gang, whose racial prototype was the council of braves? Why should he not be noisy, dirty, selfish, and cruel? Why should we not expect him to fight and settle some of his grievances as did his barbaric ancestors? If this is natural and hence necessary to the nurture and development of the preadolescent, are we going to lose our patience or become discouraged with the boy who shows these traits, which from our viewpoint are sometimes so disturbing? Prof. G. W. Fiske of Oberlin considers the matter otherwise; he says, "My reverence for the boy is due not only to the wonderful possibilities rolled up in him by the divine involution, but also to the marvelous heredity which he rediscovers to us through his rehearsal of the divine evolution."

In the light of what has been said concerning all these preadolescent characteristics, what are the practical conclusions? In part they are as follows: —

The natural impulses can and should be given considerable scope; and the untamed instincts must not be completely repressed; for it has been shown that, if this repression occurs when the instincts first normally appear, there may result "a later outcropping of belated instincts" in manhood or womanhood, "with their foolish train of moral and social anachronisms;" and further, the many wholesome educative influences which come from normal preadolescent activities will certainly be lost. This does not in the least suggest a lack of control; on the contrary, firm and sympathetic handling is surely needed now as much as at any other time in life.

✓ If health is to be kept at the high tide which is due at this time, there must be much vigorous exercise for the large muscles of the body and limbs, the hill-climbing and tree-climbing muscles. It is only in this way that the untoward influences of the schoolroom can be rendered harmless; the occupations of the schools call for the use of the small muscles, those that "wag the tongue" and move the pen.

✓ The tastes at this time, which are strong because instinctive, must be satisfied, at least vicariously; for these tastes are cravings, demanding the recapitulation of ancestral experiences, echoes of a remote past insisting upon being heard. This can be done by furnishing tales of adventure, wholesome traditions containing stories of the early heroes of the world, and history which can be made to teach the primitive virtues of the ancient peoples. Perhaps best of all for this purpose are the stories and heroes of the Old Testament, whose oriental pomp and pageantry always make a strong appeal; the stories of Joseph and of David are favorites. Interest in these Bible stories culminates at eleven. The educational value of this material, judged by the way it fixes and holds the interest of the preadolescent, is too great to be neglected. Moreover, unlike much of the material that must be included in the rudiments of an education, the early histories, traditions, and biographies have for boys and girls, when properly presented, real content; this is true, because the incidents and ideals often come down from the period of the world's history which the preadolescents are trying to repeat, because children at this age have remarkable powers of visualization, and because young people are always interested in stories as such. And further, there is little doubt that a free use of this material at this age is a pretty good safeguard against precocity, an affliction which modern arrangements frequently foster.

✓ The same may be said of nature, in all the features of which the preadolescents delight to revel,— the fields, the hills, the

forests, the animals, and especially the water. The call to them is,

"Come forth into the light of things,
Let Nature be your teacher."

Stories and nature constitute the two staples in their education, for to these they seem to be indigenous. The materials which nature and stories furnish have immediate educational value, for, as noted above, they have real content for the child.

But the preadolescent is a candidate for the higher qualities and planes of living which a long race-history has developed, hence much preparatory work must be done; and this is the golden age for storing up the countless elements of knowledge, even if they meet with little inner response; for memory is quick and lasting, and children at this age do not resent repetition and drill. In like manner it is the period for external and mechanical training; thus the special forms of motor activity requiring either exactness or grace must not be neglected if the best results are to be realized. These include dancing, writing, music, drawing, and the other activities where physical skill is indispensable. In brief, this is the time for mastering the tools of education.

As to method, the statement sounds unpedagogical: much of the instruction may be dogmatic and authoritative, and often, to get the best results, the methods must be mechanical. It is not profitable always to try to appeal to the higher reasoning powers. Incitement and insistence on the part of somebody is needed. So far as many of the fundamentals are concerned, it is a case of drill and inculcation rather than true teaching. Duty on the part of the pupil consists largely in habitual and prompt obedience; for, in giving lodgement to the fundamentals of knowledge, it is not practical to coquet with the child's likes and dislikes.

The foregoing pages should make it clear that, when we are working as parent, teacher, or leader in behalf of the welfare

of the preadolescent, we are dealing not merely with an individual; but, on the contrary, we are often struggling with the whole gang, or may be with its leader, hence the occasional surprises and unexpected difficulties. It is certain that we have to do with something that is frequently more powerful in determining public opinion in the boy-world than teachers, parents, and all other adults combined; and here, as elsewhere, public sentiment controls. And what is the significance of all this? It means that the one who would manage the boy must take his cue from the boys; he must know boy life, including gang life, and proceed in a manner adapted to the boys' nature and purposes; for this is the only way to make a successful appeal. Club life flourishes from ten to fifteen, reaching its maximum at thirteen; this is our cue. What is said of boys is also true of girls. They, of course, must be organized separately. The one who shapes and directs the affairs of the club must be an adult whom for good reasons the members admire. It is only as a real leader or as a chum that one can greatly influence the life of the preadolescent. The teacher must always be the leader or do battle for his authority; the father must become the boy's chum not later than ten or leave the welfare of his boy to others; the mother is always the chum of the girl or the girl is a stranger in her own home.

Not only is there a struggle going on between the boy and those who represent the authority and ideals of the adult world, but there is a real struggle going on between the boy and himself. In a civilized community a boy between eight and twelve must live a double life; fundamentally he is a barbarian, a member of a gang with its unwritten code running counter to much that civilization expects; superficially he is living the life of the home circle and the school, shaping his wild nature as best he can, when he is not in opposition to the artificial but necessary demands that are made upon him. Is it at all strange that he is sometimes changeable, inconsistent, fitful, or illogical,

while he is living this twofold life? It is ours to know the boy as the gang knows him, if we would understand the real boy, who is neither the member of the gang nor the sedate creature of the well-regulated home, but a creature that is being shaped by both. If we are aware of the dual life of every vigorous, normal boy, we can be much more helpful and at the same time find our contact with boy life much pleasanter.

In conclusion, it may be said, if the preadolescent has received what is due him, he comes to the end of the period with a store of health and vitality sufficient to carry him through the "storm and stress" of adolescence; he has played and laughed much and worried little (for play is his serious work); he has lived near to nature; he has made some vital connections with the world's moral and social forces through story and tradition; and he has formed many habits, including *truthfulness* and *obedience*, which it is hoped will carry over into the next period of his developing life and do much toward safeguarding and sustaining him in the days of adolescent turmoil and reconstruction, these habits being sometimes the only means of connecting the "new life" that is coming with the past life in which he has felt so secure.

It has seemed best to dwell upon this interesting period of child life, because adolescence is founded on childhood, and because we shall find considerable belated childishness in the form of belated instincts when we pass to the study of the next period. Although adolescents are rapidly becoming men and women, we must not be surprised to discover at times a lack of manly and womanly purposes; there may be horse-play and many other symptoms indicative of the spirit of barbarism; and because we have learned the origin and explanation of these untimely expressions, we shall the better appreciate their part in the strange complex which the following chapters try to unfold.

PART I — PSYCHOLOGY OF ADOLESCENCE

CHAPTER III

GENERAL SURVEY OF ADOLESCENCE

In one of his lectures William James says, "Wherever a process of life communicates an eagerness to him who lives it, there the life becomes genuinely significant." Although this is stated as a general proposition, it applies with greatest force to that period of life known as adolescence; no period has as much significance for the individual or the race, and no period is so fraught with eagerness, an eagerness concomitant with a new and intensified life. The term adolescence applies to the decade which begins at about the age of twelve or fourteen and continues to maturity; there is considerable variability as to the age when the period begins. The word designating this period is well chosen; it takes its origin from the strong old Latin verb *adolescere*, meaning to grow up. It is at the on-coming of this period, called puberty, that the boy begins to pass from boyhood to manhood and the girl, from girlhood to womanhood, with all that such a change involves. It is truly a time of "new birth;" for the individual becomes capable of new modes of thought and feeling; he suddenly finds himself controlled by a new world of instincts and emotions; it is a new life which he must learn to live and adjust himself to. The youth frequently must make a serious effort to fit himself to his environment; sometimes he finds himself in conflict with his parents, his teachers, or his friends; and there is probably always a struggle between the youth and himself,— hence the contradictions and anomalies so characteristic of the period.

It is a time when old moorings are broken and life's bark must make its course through waters more troubled, for the currents are setting more swiftly and strongly than at any other time. There is now a great, rich, rushing flood of energy. Thus it is that the youth becomes suddenly conscious of being alive in a new and significant sense, a sense very different from the *naïve*, unquestioning, and self-centered existence of his preadolescent years.

Although this period has been studied scientifically only during the last forty years, the human race has apparently always appreciated its importance and understood that somehow the developments occurring at this time are supremely significant. This is clearly indicated by the various ceremonies observed among savage peoples in recognition of the new birth of adolescence. It was the custom among the aborigines of Australia to allow the children to remain with the women of the tribe until the time of adolescence, when the boys were taken by the old men, the sacred bull-roarers, and instructed in matters known to the men, after which they were expected to take part in all adult male activities. Among many savage races the ceremony incident to adolescence takes the form of a difficult ordeal or test, which the candidates for the privileges of manhood must pass successfully. This required proof of virility may be the securing of the scalp or the head of an enemy, or it may consist of the stoical endurance of much physical pain. It is only after these initiating mysteries that the male is allowed to take unto himself a wife and assume the responsibilities of sustaining and defending a family. Among the Indian tribes of North America it was the girl who received special attention and for whom the most exacting initiatory ceremony was observed at pubescence; it was for her that the ordeal was planned, which sometimes cost her life. So it would seem that nearly all savages are fully aware of the deep significance of adolescence.

Among the Romans, who were so thoughtful concerning everything that makes for efficiency in the individual, as well as in the body politic, the boy at the age of fourteen was recognized as a social unit and on him was conferred the privilege of wearing the *toga virilis*.

In the days when knighthood was in flower the same consciousness of the significance of adolescence was manifested. From about seven to fourteen the boys were much in the company of ladies, receiving their lessons in games, music, religion, obedience, and courtesy. At the age of fourteen the page became a squire, when it was his duty to accompany his lord in war, going with him on the battle field and attending him while defending his knightly name in the tournament. Meanwhile the squire has often been told the stories of the brave knights of the olden time. Thus there was created about him an atmosphere of honor, courage, and gallantry at an age when he was most susceptible to these ennobling influences. Then, toward the close of adolescence he was made a knight with imposing surroundings and ceremonies. Judged by results, this system, which made so much of adolescence, was a success; the valiant, loyal, and gentle knights were the ideal gentlemen of the Middle Ages, constituting one of the bright spots in that dark and discouraging period of human history.

The church, too, has not been unmindful of the importance of adolescence; confirmation and other like ceremonies are given a place in the life of the child with reference to this critical period in his development. In the Episcopal Church it is the custom for boys to take their first communion at about fourteen and girls at about twelve, indicating a very careful timing of this sacrament relative to the on-coming of this great physiological and accompanying spiritual change. Although the time of taking, in a formal way, the vows and obligations of religion differs somewhat in the different churches, all seem to have had in mind this significant physiological change when deter-

mining the best and most impressable age at which to dedicate the children to a religious life.

The more evangelical churches are also aware of the significance of adolescence in the religious development of the individual. They have learned that, if anything like conversion is to be experienced, the chances are many in favor of this happening sometime during the teens, sixteen being the age, as shown by statistics, when the greatest number decide to follow a religious life and unite with the church. The physiological and consequent psychological developments which are in progress at this time make this religious awakening one of the most natural experiences that could occur; the reason for this will be evident when the nature of adolescent changes are described.

Again, nearly all literature and art which make a strong human appeal have recognized the significance and deep interest of this period. The fields of literature would seem extremely barren and uninviting if all of love and adventure and everything that pertains to these were removed. Nearly all poetry and fiction have for their motive the meeting and mutual discovering of two adolescents. In literature we read the accounts of incidents peculiar to and consequent upon adolescence rather than descriptions of the characteristics of adolescence; and it is to adolescence with all its varied charms that artists of all kinds have oftenest turned for subjects and for inspiration, this being true even in the Middle Ages when religion and the church, with much effort at abnegation and humbling of the flesh, dominated practically all art; the budding beauty of adolescent manhood and womanhood inspired the brush and chisel, and fascinated the beholding worshipers. It is the youthful Mary and Magdalene, St. John and St. Sebastian that charm with their beauty. It is the charm and beauty of youth that has given us the most interesting characters in Plato's Dialogues, in Shakspeare's plays, and in George Eliot's novels; and Goethe, who never seemed to outgrow his own adolescence, has given

us his famous studies in adolescent emotions and moods in Werther and Wilhelm Meister.

Thus the world has felt that somehow adolescence is a great central fact in human development, an epoch in the life of the individual which is clearly anticipated by much physiological preparation during the years of preadolescence, and an epoch from which dates nearly all that gives character and the finer elements of personality, the most formative of all periods of growth and development both for the race and for the individual. The facts referred to thus far certainly emphasize the importance of this period; and of late it has been receiving much attention from students of education. Surely a knowledge of it should be included in the equipment of all who are to deal with boys and girls that are living through its meaningful changes. But the student of the period is confronted with a number of difficulties and dangers of considerable magnitude.

In the first place, he cannot well remember his own adolescent thoughts, feelings, and experiences: the experiences have lost much of their color; the emotions live in memory (if at all) greatly softened, having come to resemble the later eddyings of life's currents; and the thoughts, which at first seemed new and important, have become so commonplace that both they and their emotional setting have ceased to represent any distinct mental process worthy of note. The evanescent nature of adolescent experiences is no doubt due largely to the psychological fact that a past experience, in order to be recalled and revalued with any degree of accuracy and satisfaction, must have somewhat the same instinctive promptings and be surrounded by a somewhat similar emotional atmosphere, conditions from the nature of the case wholly impossible; for the instinctive and emotional content of adolescent life is distinctively peculiar to that period. The rapidity with which adolescence is forgotten is well illustrated by an incident related by Dr. G. Stanley Hall. He had finished a popular lecture in which he had de-

scribed the characteristics and experiences of adolescence; a lady present asserted most emphatically that she at least had never had any such experiences as the lecturer had just described. But fortunately for Dr. Hall and his thesis, the lady's mother had kept her daughter's youthful diary, and it was known to contain, among other things, the record of many psychical experiences distinctly typical of adolescence as pictured by Dr. Hall in his lecture.

The difficulty is considerable, too, when we try to study the adolescent directly. Many of his thoughts and emotions are to him unique and of such a nature that he does not wish to describe them to others; sometimes they are unpleasant, and sometimes they are felt to be too personal and in a way sacred; so he instinctively withdraws into himself and does not report frankly concerning these matters, which at best he feels would not be understood and might be interpreted as weaknesses or eccentricities. Thus the enthusiastic investigator is not admitted to the inner temple of adolescent consciousness and must look elsewhere.

It is often said that "actions speak louder than words," hence let us judge the nature and inward experiences of the youth by what he does. But all who know adolescents are aware of their adeptness in the art of concealment. We need not expect the boy in his early teens to "wear his heart on his sleeve." His soul is often teeming with new sentiments, sympathies, and flowery ideals, yet he will play his part, whatever the circumstances, apparently with the utmost indifference. This skill in concealing their real thoughts and feelings is frequently evident when the sexes meet on occasions when they are expected to mingle and enjoy each other's society; witness the segregation on sex lines exhibited in the groupings and the assumed air of indifference to each other's presence manifested at a class party of first year high-school pupils. Moreover, if we attempt to learn their real sentiments by questioning, both

boys and girls, especially in their early teens, will instinctively guard their inner life by a system of evasive and false answers; this insincerity, if they were conscious of it, might be justified by them on the ground that they themselves are not fully and definitely aware of their own inmost thoughts and emotions, because they are so new and often so vague and ill-defined.

Then, too, when it is possible to get at the real inner processes of the adolescent mind, we are confronted with the most bewildering multiplicity of moods and characteristics, moods and characteristics often perplexingly contradictory. No two adolescents show exactly the same traits, much less the same progressive sequence of traits; but this is not surprising, since in general we do not expect to find two people just alike. However, it is disturbing to enthusiastic students of adolescent psychology to discover that very frequently the inner life which he is trying to know accurately and describe scientifically is an extremely nebulous affair; when he thinks he has the form and content of his subject well in hand, lo and behold, like the elusive Proteus with whom Ulysses struggled so manfully, it has taken on a new shape; in other words, this is often a time of transitory moods and thoughts; at one time youth is active and energetic and again lethargic and static, now on "the celestial mountain" and now in "the slough of despond." At times it would seem that there is little coherence among the elements of personality; and naturally all these transitory moods and contradictions are as perplexing to the subject of the investigation as to the investigator.

Another danger, ever present when any continuously progressive series of events is under consideration, is the tendency to draw exaggerated pictures of certain moods and mental phases of this period; such is likely to happen when any period of life is arbitrarily set off, as is necessary, for purposes of study; but the temptation is particularly strong when we are dealing with such striking and often dramatic material. Sometimes

it would seem that the analytic method of attack is peculiarly ill-suited to the study of such a thing as the living, dynamic, continuously changing stream of individual life. Here everything occurs by infinitely minute gradations; in reality there are no lines such as we set up for our convenience in study; all is a flux, what the philosophers call a *continuum*. This is true in both the physical and spiritual realms, hence the ever-present danger alluded to. Moreover, a writer on such a subject is often tempted merely in the interest of clearness to over-color his descriptions and exhibit the contrasting features of his picture in the high lights. No period of human development has been more sinned against in this way than adolescence; for nowhere has the temptation been so great; and all recent students and writers have had before them a monumental example of this tendency toward the exaggerated, not to say fantastic, in the elaborate descriptions and speculations of Dr. Hall.

But some of the recent students of this period, influenced by the spirit and methods of a scientific age, have carefully attempted to overcome and offset the dangers and errors incident to the study of individuals by taking into account thousands of adolescents, thus arriving at averages and curves representing growth and development. And here, again, we are in trouble; no one would claim that an average is a real living boy or girl, or that it can be made to represent any part or phase of life. When once obtained, an average is *fixed* and *static*, two qualities the furthest possible from representing or even suggesting anything characteristic of the nature of adolescence. And so it is with the curve, now so much in use; although it may be made to represent a progressive series of events or stages of development and the concomitant variants, yet the curve, as such, is as definite and fixed as the average, and hence cannot be made to stand for life or any of life's processes. Then we must add to this consideration concerning averages and curves,

that the original sources of the data from which the averages are struck and the curves plotted are the adolescents themselves, whom we have found so unreliable. When pursued by the persistent maker of questionnaires and asked to tell of their likes and dislikes, their instinctive reactions and their emotional responses, their manner of thinking and their ideals, who knows how near the truth their answers come, even assuming all concerned aim to be frank and truthful in exposing to view their innermost sentiments? The method involves the same fallacy as "guessing at half and multiplying by two."

Yet in spite of the obstacles and dangers peculiar to this study, there are a number of pretty definitely established facts and tendencies of a general nature that have much interest for the parent, the teacher, or any one who deals with boys and girls of this age. Some of these it is the purpose of the remainder of this chapter to consider.

Although some writers have made too much of the idea, it is helpful to think of the physical and psychical changes that set in at this time as a "new birth," a view suggested by Rousseau many years ago; new and all-important functions come into existence, and with them higher and more complete human traits are born, manifested by a distinctly more individualistic and human attitude. It has been said that the child comes from and harks back to a remoter past, the ages of the kinship clan and the tribal organization; but in the adolescent the later acquisitions and developments of the race become potent. The forces and tendencies that were formerly operative, if they continue, seem to break up and recombine, resulting many times in an almost new being; the individual is now responding more completely to his social environment and to his own will; personal loyalty, self-reliance, and leadership are the stages in will-growth which closely follow and frequently telescope into each other during the ten years of adolescence, while the corresponding charac-

teristics are chivalry, self-assertion, and a spirit of coöperation. All phases of physical and mental development are accelerated and intensified. Because the old harmonies characteristic of preadolescence are broken and the finer adjustments to environment of that earlier period have been disturbed, because of the saltatory nature of the developments that are taking place in the mental and emotional life, developments based on new instincts and new powers, because of all these changes, the physical and especially the social world seem strange and novel. This awakening to a seemingly new world gives rise to a double perplexity; for the youth understands neither his apparently changed surroundings nor his transformed self. However, there finally emerges out of all this inchoate confusion some kind of order, and, as Bourne says, "the disturbing currents of impulse are gradually resolved into a character." Do not all these vital changes in the individual and his views of life warrant the use of the term new birth? First he is born "to exist," and now he is born "to live."

Although in adolescence there is a great variety of contradictory characteristics as we pass from one individual to another, one characteristic is always present in every normal youth and that is *life*, and life in abundance. At this period the stream of life is sometimes so swollen and the currents are setting and surging so vigorously that it breaks through and overflows its natural channel, and, as with the delightful meadow brook during the spring freshet when it overtops its banks, there is trouble; life's stream in this showery springtime takes on a new and disturbing character, and the practical outcome is often surprising to all concerned; the very abundance of life, which is most desirable, appears to be the cause of the trouble. However, it will be shown in a later chapter that this is not the scientific and helpful way of stating the case; there can never really be "too much of a good thing."

By reason of the comparative suddenness of the change,

which is both quantitative and qualitative, that comes in the life-processes, it has been customary to refer to this period as a turning point in the life of the individual, and many figurative expressions have been used to indicate its revolutionary nature. However, "turning point" or crisis is not quite accurate; it is rather a *series* of crises, and a series the terms of which sometimes exhibit the most perplexing incongruities. Perhaps with a majority of adolescents this period is lived through so successfully or seemingly so calmly that the expression series of crises is over-emphatic, since the more striking features appear almost non-existent. As to how the individual responds to the on-rushing flood of new sensations, instincts, and emotions depends largely upon two things, temperament and social environment, the one subjective and the other objective, the one largely predetermined and the other to be controlled; the discussion of this control belongs to later chapters.

The next fact to be noted concerning this period is the logical outcome of the characteristics already described, and it is by far the most important consideration; for it is the central pedagogical fact of adolescence. This is the great *formative* period for the individual; what happens now conditions and largely determines all that the future has in store. It is the significant day of new things, the Renaissance of life, the time when the elements of personality (some old and some new) are being assembled and unified, the age when the finer, higher, and more human traits of character are being developed and built into definite form. This is but a way of saying that, of all times of life, this is the most plastic, because of the power shown to reshape and recombine and because of the capacity manifested to absorb and assimilate whatever chances to come into the intellectual, moral, industrial, religious, and above all, the social environment of the individual. Youth must now eat of the fruit that grows on "the tree of knowledge of good and evil."

It is the time when youth enthusiastically greets and welcomes all that he discovers in his apparently new environment. It is the time, too, when he receives his social heritage; the great wealth of non-material resources which the race has, through much effort, been accumulating during all past time is now due him; "and it is a matter of much moment whether he rejects, or whether he accepts and appropriates this heritage.

Since adolescence is a period of such rich and vital possibilities, since it is the time the man or the woman, with all that is implied, is created, it logically follows, other things being equal, that the longer this formative period lasts, the more will be accomplished for the individual; consequently the richer will be the life of the man or woman, and the race's accumulated store of manhood and womanhood be thus increased. Such is the case; this psychological possibility is a historical fact. A number of years ago John Fiske made his most important contribution to the science of human life when he showed the relation between a prolonged infancy and the progress of the race. In the same way and for the same psychological reason, the highest civilizations and a prolonged adolescence are found together; maturity among savages comes at an earlier age, and the process is of shorter duration. With the individual it is generally found that, if the pubertal changes take place at the normal age, considering race and climate, and if the maturing, both physical and mental, is not in any way artificially hastened, the greatest and most satisfactory results follow. There is another interesting fact connected with this: genius in almost any field of human endeavor (with the possible exception of music, which often appears early) is foreshadowed during adolescence; and, as Dr. Hall has pointed out, the whole future of the youth depends upon husbanding and directing the new powers. Caution is usually needed; for by reason of the newness of the experiences, and because of the momentum of the forces that are surging within, every trait and faculty is prone

to exaggeration and excess, consequently the liability to trouble and waste.

Before closing this general survey it will be helpful to mark off as clearly as possible the three phases or stages of development of this period; they are now generally recognized as, early, middle, and late adolescence. Although these stages are not naturally separated by any sharp line of demarcation, but frequently telescope into one another, they are readily distinguished and easily characterized. Early adolescence with the boy generally extends from about thirteen to fifteen years; middle adolescence, from fourteen to eighteen; and late adolescence, from seventeen to twenty-four. The overlapping of these stages, as just stated, indicates the wide variation in the development of youth. With girls each of these stages of development begins about a year and a half earlier.

Early adolescence has been variously named: the awkward age, the period of chivalry, the age of personal loyalty, the time of hero worship. According to the recapitulation theory, it is supposed to correspond to the feudal period of the world's history. It is the time of very rapid physical growth, the increase in height during one year sometimes reaching four to six inches. The movements are awkward, due to a new self-consciousness and the lack of adjustment of the nervous system to the changed physical proportions. The old, well-adjusted harmony with nature that characterized preadolescence is broken up. It is the time of puberty with all that it implies. The center of personality is physiological rather than psychological; new sensations, instincts, and experiences are rushing in and have not yet been fully translated; hence meanings and values are not yet determined. Mental unity must of necessity come later. It is not strange that youth at this time is frequently unresponsive and occasionally stolid; for he is uncertain of himself. As King explains it, "he has not yet felt enough of the uprushing vital force of youth to step out

in any positive way or assume any definite attitude of his own." The pleasing teachableness of preadolescence has passed and the splendid idealism of middle adolescence has not appeared. However, many fine traits here take their rise; early adolescence is really the infancy of man's higher estate. The comradeship of the gang has gone, but the capacity for personal loyalty has taken its place. The ready and convenient obedience of boyhood and girlhood are frequently lacking; but loyalty may naturally be made a substitute, for in it shines the spirit of true obedience as distinguished from coercion. Generally these two years are thought of as troublesome and disagreeable; the girl is tall and awkward, neither girl nor woman; and the boy is usually worse, feels more his lack of poise and is less docile.

Here is Tagore's description of the boy. "In the world of human affairs there is no worse nuisance than a boy at the age of fourteen. He is neither ornamental nor useful. It is impossible to shower affection on him as on a little boy; and he is always getting in the way. He grows out of his clothes with indecent haste; his voice grows hoarse and breaks and quavers; his face grows suddenly angular and unsightly. . . . When he talks with elderly people he is either unduly forward, or else so unduly shy that he appears ashamed of his very existence."

But all is likely to go well if there is at hand a strong adult personality, for this is a time of hero-worship. To quote again from Tagore, who has been so successful in dealing with Bengali adolescents; "It is at this very age when in his heart of hearts a young lad most craves for recognition and love; and he becomes the devoted slave of any one who shows him consideration." Experience soon causes the youth to realize that, if his efforts at coöperation are to be continuously successful, there must be a leader. When the leader is worthy according to his standards, the youth will gladly follow; he admires in

his leader resourcefulness, alertness, skill, physical prowess, and the other feudal virtues. Yet the choice of a hero at this time is frequently discouraging; it may be a football star, a bull-dozer, a real gentleman, a boy tyrant, or even a boy criminal.

Altogether, early adolescence is likely to be a strange, unsettled, impulsive, yeasty, tumultuous, unattractive, but not uninteresting time in the development of youth, a time that must be understood and sympathetically dealt with. It is the age of the upper grades of the elementary school and the first year of the high school; it is an age whose peculiar needs call for carefully determined school treatment, which many educators throughout the country propose to furnish by means of the junior high school, or what Snedden calls the intermediate school. The junior high school is the subject of a later chapter.

Middle adolescence is preëminently the period of self-assertion; it is the time when the individual naturally develops self-reliance; it is the age when the ego comes into its own and to some extent slips into the place of the hero; Shakespeare's "to thine own self be true" now makes a strong appeal. This epoch in the life of the individual is said to correspond to the Revolutionary Period of constitutional monarchy. Physical growth is not so rapid as during the first two years of adolescence, and body and limbs are now assuming the form and proportions of manhood and womanhood; there is the clean-cut muscular figure which displaces the delightful chubbiness of earlier years, and there is the chiseled face of eager youth. The center of personality is fast shifting from a physical to a spiritual basis; as King says, "the youth emerges from the somewhat animal-like crassness of the pubertal years and begins to think of his social relationship, his duties, and the rights and wrongs of his acts." He still thinks of himself, but of himself as related to others. Although there is as yet a

lack of mental perspective, the youth is beginning to have a sense of values, and life is coming to have much significance. Much intellectual curiosity and enthusiastic eagerness and alertness now take the place of the earlier unresponsiveness. Although some fickleness is carried over from the earlier period, a new manliness and womanliness is rapidly becoming manifest, and an appeal to "honor" can most profitably be made, for now comes, as Montaigne expresses it, "the relish of right and wrong."

Because the social instincts are so largely in control, coöperative games with much team-work displace the more individualistic games. A combination of initiative and capacity for coöperation develop side by side; this means that the youth must now begin to get his training for leadership. A man or woman with strong personality is now greatly needed to lead and to suggest; for youth has not yet sufficient self-control for continuous self-government. The social horizon is widening more rapidly than at any other time in life; it is now that the youth must take practically full possession of his social heritage; for the social instincts are now ripening most rapidly.

On the spiritual side youth is seeing visions and thinking great thoughts, inspired often by a fine idealism; and he should be daily growing richer in that which is distinctly human and charming. Although not really an adult, the youth must in many things be treated as an adult and never as a child (the greatest possible mistake that could be made). This is preëminently the high-school age; hence the high-school curriculum and all the school activities must be so planned and administered as to make the strongest and broadest social appeal. ✕

If the two earlier stages of adolescent development have brought to the individual the maximum growth in personality and self-reliance, late adolescence should manifest itself as a period fraught with great possibilities for coöperation and

leadership; individual resourcefulness, leading to various forms of efficiency, should characterize young manhood and womanhood from seventeen to twenty-four. Carrying out the recapitulation theory, this phase of individual development may be said to parallel the present stage of the world's political maturing, the epoch of the self-governing state or republic in its highest form. Although complete physical maturity is not reached until from twenty-three to twenty-five, the bones and muscles are so well "set" and the joints are so firm that very vigorous and trying sports and labor may profitably be indulged in; hardening must be brought about by combined physical and mental strain; the physical being must now be brought to its perfection, for it is the last chance. The mind should now be ready to undertake its deepest and most difficult thinking, and see things as wholes and in their true relations. It is the time for the greatest originality, the most consummate strategy, and the perfection of the social graces.

At this time arises the desire for social service and with it the highest possibility for cultivating this field. It is the time, too, for training in vocational skill if the best results are to be realized. Because this is preëminently the age for coöperation and the securing of coöperation, some type of leadership may be expected,—athletic, political, oratorical, social. The young man must have an opportunity to practice leadership at least on a small scale; its responsibility has a sobering and maturing effect. Now for the first time the young man or young woman becomes capable of real self-government and is able to join with others to form successful self-governing groups. It is during this period that the individual naturally begins to feel his allegiance to his country; the personal loyalty of early adolescence now becomes patriotism. In brief, this is the age when young manhood and young womanhood reaches its perfection. Educationally it is the age when we expect to find the adolescent in college; and the colleges have the responsi-

bility of providing for development and training along all the lines suggested by the powers and tastes which appear at this time.

Enough has been said in this chapter to show that we are approaching a most fascinating and worthy theme, a study that should be helpful to all who would assume a practical attitude toward all phases of human nature. To deal successfully with human beings we must deal with them as they are, and to that end we must understand them as they really are. There is no period of life more difficult to deal with on a practical basis than this period of youth; but the difficulties involved do not warrant discouragement, nor do they in any way suggest a passive attitude toward the many troublesome problems. It is certainly not a matter of tiding youth safely through these critical years, but it is a work of character-building (commonplace as this sounds) and it demands an active instead of a timid, passive attitude. The nature and the boundless energy of youth furnish the raw material and the vitalizing force; but the results depend more than is generally admitted upon educational and social forces. There is no age so responsive to all that is best and socially effective; and the seeds, both the good and the noxious, strike deep roots into the psychic soil. Those who have had experience do not need to be told that, not only is the nature of the adolescent intensely fascinating as a study, but still more interesting and inspiring is youth itself to all who are fortunate enough to have close and sympathetic contact with wholesome adolescent boys and girls.

CHAPTER IV

PHYSIOLOGICAL CHANGES AND CHARACTERISTICS

All the phenomena alluded to in the preceding chapter, which are so significant for the individual and the race, have as their background the characteristics and changes to be described here. The maturing of the all-important sex functions constitutes the central and casual factor of the whole adolescent period. Accompanying this functional development, which is known as puberty, is a very rapid and often erratic physical growth, followed by a wonderful mental and social development and reconstruction. It is the purpose of this chapter to give a somewhat detailed account of the physiological changes which occur at this time.

The first fact to be noted is the variation in age of the on-coming of the pubertal changes. In this matter the range of individual variation is generally from ten to eighteen years, both ages being very unusual. Large numbers of boys and girls have been studied, and it has been found that the average time for the beginning of puberty with girls is twelve to thirteen and the average for boys is fourteen. The tabulated results of a study of 4800 boys in the New York high schools by Dr. C. W. Compton show that six per cent were mature at twelve and three-fourths years; and the percentages of boys becoming pubescent each succeeding half year are as follows,—12, 13, 15, 14, 10, 15, 8, 3, 2; thus, when the age of seventeen and three-fourths years is reached, the whole 4800 boys have become physiologically mature. An Italian student, Marro by name, has arranged a table showing the onset of puberty for 261 girls. One matured at ten years of age, six at eleven, sixteen at twelve,

thirty-four at thirteen, sixty-one at fourteen, fifty-four at fifteen, forty at sixteen, twenty-nine at seventeen, twelve at eighteen, four at nineteen, two at twenty, and two at twenty-one. Marro's table shows a greater variability and a higher average age than is generally stated by American students of adolescence. The age at which puberty takes place has much importance for those who are trying to solve certain administrative problems in public education; for it has been shown by recent studies that there is a vital relation between the on-coming of adolescence and the success of pupils in doing certain kinds of school work. Individual differences as shown by these tables are so marked that the need of a considerable degree of flexibility in the school machinery is suggested.

It is well to note that this great variability in the age of puberty, as shown by the studies made thus far, is paralleled by the same degree of variability in many other physiological changes incident to adolescence. Thus individual variability itself is one of the common characteristics of the period of adolescence; that is, the range of difference among individuals relative to any one trait is greater during adolescence than at any other time. Because of the marked and extreme variability in the appearance of the many adolescent characteristics, it is convenient in our educational discussions to use the term "physiological age," which stands for the degree of physiological maturity the pupil has reached, puberty being the central change from which maturity is reckoned. The tables already referred to indicate that there is often a great lack of agreement between the physiological age and the chronological age. The other terms used in this connection are psychological age and pedagogical age; the first is determined by the pupil's degree of mental development and the latter by his place in the school.

There are many influences which affect in a pretty definite way the age of physiological maturing of the individual; and the results, as effecting the welfare of the individual when the time

of maturing is other than normal, have been rather definitely established. As already noted, sex is usually a determining factor, the girl maturing from a year and a half to two years younger than the boy. Thus in any school grade with an equal number of boys and girls the average physiological age of the girls is greater than that of the boys; and this is easily detected by observing either physical or mental characteristics. Then climatic conditions influence the age of puberty. In general it may be said that the warmer the climate the earlier the pubertal change comes, especially is this true of the dark-skinned races. In the countries near the equator puberty sets in at about ten or eleven. A study of the races of the temperate zone indicates that the various Scandinavian peoples mature later physiologically than the others, and the Hebrews somewhat earlier. Again, and of more practical importance, economic and industrial conditions have a marked influence upon the individual's age of maturing. All that may be covered by the term hygiene — nutrition, fresh air, sleep, clothing, and the rest — affects in a definite way the age of puberty; good conditions tend to early maturing and unfavorable conditions tend toward retarded development. Thus it is not surprising to find the children of the well-to-do maturing earlier than those of the laboring class. So far as can be determined, the advent of puberty seems to depend to a considerable extent upon the hygienic conditions under which the children live during pre-adolescence; without doubt this is the time when the individual should lay in his store of health and energy if he is to have an early and successful adolescence. F. Boas, who is an authority in the matter, says, in an article in *A Cyclopedia of Education*: "Among the poor, the period of diminishing growth which precedes adolescence is lengthened and the acceleration of adolescence sets in later. The whole period of growth is lengthened; but the total amount of growth during this longer period is less than the amount of growth attained during the

shorter period of growth of the well-to-do." "The whole group of the poor are, at any given time, physiologically younger than the well-to-do." Hence the important conclusion is reached, that, so far as the individual is concerned, any conditions that favor a moderately early development are much to be desired; also, as we should expect, whatever affects the physical well-being affects also the mental. Although of less pedagogical significance, it is patent to all observers that heredity has an unmistakable influence in this matter under discussion. Certain families of the same social status and the same race as the rest of the community are noticeably early in maturing; but thus far the effect of early maturing due to heredity has not been determined by a study of a large number of cases.

Before considering the many physical changes occurring at this time that are determined quantitatively by accurate measurements, it may be well to mention a few characteristics that appear on the surface and have been noted by all who are interested in youthful development. No one has failed to note the marked change of voice in the boy. All are familiar with the rapid shooting up in height. The mother knows how difficult it is to keep the boy's sleeves down to his wrists and to maintain his trouser bottoms at the proper level. The boy, as well as every one around him, is aware of his awkward movements; for he is continually bumping into things, much to his embarrassment and other people's annoyance, and he never knows what to do with his hands and feet. His whole bearing shows a great lack of poise. In these matters the girl is a little more fortunate, although for a year or two she is for her size too slim and wanting in womanly contours, and her movements have lost the charm of her childhood years and the agility and grace of her preadolescence. It can be seen without measurements of any kind that the different parts and organs of the body are out of proportion; and careful observation reveals the fact that, in the case of any individual, each part

seems to have its own period of acceleration and retardation. Judging from these seemingly freakish manifestations of growth, one is led to the general conclusion that, as Hall characteristically expresses it, growth is "essentially non-logical and forever inconsistent with itself. The logic of the schools is *ex post facto*." Thus these years of early adolescence have, for their superficial characteristics, lack of proportion and lack of poise.

Since increase in height and weight furnishes in a general way an index to the growth of an individual, it seems best to begin our study of the order and manner of adolescent physical development with an account of the way height and weight vary. To begin with birth, during the first years there is a period of very rapid increase in height and weight (fifty to seventy-five per cent the first year); then comes a rapid falling off, which in some cases is twice as rapid the second year as the third. From about three and a half years there comes a gradual dropping of the curve until the period of preadolescence is reached. From eight to twelve the curve of increase runs almost level; that is, the increase is relatively slow. Then comes the sudden rise in the curve indicating the rapid growth of the first year of postpubescence. A study of height and weight based on the measurements of 88,000 pupils in the schools of Boston, Milwaukee, St. Louis, Oakland, Cal., and Toronto was made by Boas and printed in the report of the Commissioner of Education for 1896-7. The tables there compiled show that boys are slightly taller and heavier than girls of the same age during childhood and preadolescence; a change in relative height and weight begins just before the on-coming of puberty; girls are taller than boys from eleven and a half to fourteen and a half, and they are heavier from twelve and a half to fourteen and a half. The crossing of the curves of growth at this time is due to the earlier setting in of puberty with girls and the consequent earlier postpubescent

acceleration already referred to. But boys continue to grow at an accelerated rate for a longer period than girls, hence overtake them, ultimately exceeding them in height and weight, the difference being greater than during childhood. The first year after puberty is also the time of greatest increase in strength. With girls there is very little increase in height, and that very slow, after seventeen; while boys continue to grow in height until nineteen. After this there is a very slow increase in height of boys till, perhaps, twenty-three and in weight till about twenty-five. According to Dr. D. A. Sargent of Harvard University, "it is a question whether most of the weight accumulation after twenty-five is not more or less abnormal." All the foregoing statements concerning growth are based on the measurements of large numbers and represent averages; whereas the growth of the individual is frequently spasmodic. However, those who are working with boys and girls and seeking their welfare must realize the importance of these physical norms as part of their pedagogical equipment.

All this increase in height and weight means a corresponding increase in nearly all the organs and parts of the body, but, as already intimated, the increase is not usually proportionate, hence the necessity of studying the growth and development of the separate parts and organs, which are found to have different rates of increase, each having its own period of acceleration and retardation. This complexity of growth which obtains among the various parts of the body and the consequent difficulty that the adolescent experiences in making the proper new adjustments accounts for his lack of motor-control and his resulting ungainly movements already mentioned.

As with the body in general, so with the bones; growth is not a simple affair. In some cases they grow longer and thicker, the thickening being due to the addition of new periosteal layers; in other cases they take on new shapes; and they change in chemical composition while the process of completing their

ossification is going on. The thigh bone, the largest in the body, usually has the greatest growth, both relative and absolute; it grows in both length and thickness; and the individual's rapid increase in height is due mainly to the lengthening of this bone. In giants the thigh bone is most out of proportion in length. At this time the pelvis enlarges and in girls changes greatly in shape, the change in its vertical axis being one of the first adolescent developments in the girl; this change leads to certain awkward movements and makes running difficult. With girls the development of the pelvis furnishes the most exact index of pubertal development. Chest measurements indicate that there is a slight increase in circumference during the first two years of adolescence, and the maximum rate of development is reached at fifteen and continues until nineteen. In infancy the chest is relatively deepest, and it grows broader and flatter till the early teens, when its girth is about equal to the sitting height. The face lengthens about an inch and grows noticeably broader; the distance between the eyes increases; the lower jaw becomes heavier; and the nose becomes more prominent. These modifications, combined with others, give rise to a greatly changed facial expression. The bones and the muscles lead all the other tissues of the body both in growth and in complexity of development.

It is to the muscles that the body owes much of its weight and bulk; and much of the increase in size and weight which occurs at puberty is due to growth of muscles, whose relatively rapid increase is shown by the following figures. In a child of eight the muscles constitute about 27 per cent of his weight; at fifteen they constitute nearly 32 per cent; and at sixteen they have jumped to 44 per cent. This great influx of muscular energy gives rise to many disturbing effects. For a time the bones and the muscles appear to vie with each other in rapidity of growth; when the muscles forge ahead, there is a looseness of muscles and the consequent clumsiness and lack of coördina-

tion; if the bones excel, we have cramps and "growing pains." But, when this remarkable increase in size and vigor is nearing completion, when coördinations have been established, and when the youth is again master of his movements, the net result is a wonderful increase in all the powers that fit him for every form of physical effort. As Dr. Hall expresses it, nature arms him with "all the resources at her command — speed, power of shoulder, biceps, back, leg, jaw — strengthens and enlarges skull, thorax, hips, makes man aggressive and prepares woman's frame for maternity." Youth is the golden age for training in muscular dexterity and endurance, the time when all the permanent physical habits are formed, and the time when progress in all kinds of bodily efficiency must be made. The relation between muscular welfare on the one hand and health and efficiency on the other is so close that various systems of physical education have been worked out, giving almost exclusive regard to muscular development and training.

Because of the disproportionate growth of heart muscles and arteries during adolescence, there frequently arise temporary functional disturbances. Sometimes these take the form of sudden fluctuation in the rate of the pulse, palpitation of the heart, frequent headaches, or anemia. All these unfavorable symptoms are caused by a greatly increased blood pressure. The muscles of the heart relative to the size of the arteries have greatly increased; according to measurements made by Landois, the relation of the size of the heart to the size of the arteries at birth is 25 to 20, at the beginning of puberty it is 140 to 50, and at maturity it is 290 to 61. Authorities agree that this great change in the ratio of the heart to the arteries and the consequent increase in blood pressure is of profound and far-reaching significance. The untoward and disquieting effects are only incidental and occasional, without any danger of structural derangement; whereas the associated and the augmented blood pressure (and the connection is doubtless causal)

increases metabolism, giving rise to the increased growth already described, and the physical and mental activity characteristic of the period. And there is good reason for believing that the slight increase in temperature at puberty, amounting to half a degree Fahrenheit, "the psychic intensity," and "the emotional prodigality," which will be described, are results of blood pressure and arterial tension. Thus, it is apparent that this changed relation between the size of the heart, which increases in muscular power at about the same rate as other parts of the body, and the size of the arteries, in which there is a much slower rate of growth (continuing, however, long after growth has stopped in other parts) is fraught with great possibilities in the matter of health and individual development of every kind; opinion favors the theory that the earlier and more marked the growth of heart muscles, the earlier, more vigorous, and more complete the development at puberty.

As we might expect from the decided enlargement and broadening of the thorax already referred to, there is much growth, as well as development, of the lungs during adolescence; this is shown by weight of lung tissues, which constitutes in childhood one and a half to two per cent of the body weight and in maturity two and one half to three and two fifths per cent. By use of the spirometer, the lung capacity and the breathing capacity of a large number of people at all ages have been ascertained with a considerable degree of accuracy. This capacity, taken in connection with body weight, gives us an index of general vitality. The measurements of a large number of pupils indicate that the breathing capacity of girls increases rapidly from twelve to fourteen, after which the rate of increase diminishes till about twenty; and that boys take a sudden start at fourteen and increase very rapidly till sixteen, with a slower increase till about nineteen and a half, the maximum of forced expiration coming at sixteen. All experiments show that chest and lung development respond very quickly

to timely training in the form of proper exercises. Boys seem to have a marked advantage over girls in capacity for chest and lung development by training, always showing superior expansive power.

The change of voice which occurs at puberty is one of the most obvious characteristics of the period, being most marked with boys. It is due to the rapid growth of the larynx, with a corresponding lengthening of the vocal chords to approximately double their former length; according to a well-known law in physics, the result is a drop of an octave in the pitch of the voice. There comes also at this time an increase in volume and usually a pleasanter quality. With the boy it usually requires two years to get full control of his new voice in the lower register; during these two years he often suffers considerable embarrassment by reason of the characteristic roughness and occasional unexpected "breaking." The change of pitch in girls is slight, but there is a very noticeable increase in fullness and richness of quality.

But the organ, which, for the purpose of our study, as well as for the individual, has by far the greatest interest is the brain. To our surprise, there is practically no increase in weight or size at adolescence. Yet there must occur at this time manifold changes and remarkable developments in complexity. The adolescent is impelled by new instincts; he is alive with new emotions and ideals; his intellectual grasp increases by leaps and bounds; he is moved by motives which were absolutely unknown and meaningless to him before; and there comes to him a new and sometimes insatiable thirst for experience. For all this psychic development there must be a physical basis; hence by implication, if there were no other way of knowing, there must take place marvelous structural developments in the cells and fibers of the maturing brain. It is clear that there are at least two psychic phenomena to account for; namely, (1) the awakening of new instincts with

their resultant emotions and (2) the elaborating of intellectual life in general and the marvelous possibilities for the individual that lie in this direction. Even before the remarkable studies of brain structure made by Donaldson, Kaiser, Cajal, Vulpus, Kaes, Flechsig, and others, it was supposed that important modifications occur during adolescence, the significant changes setting in at the beginning of puberty; since increase in mass is slight, it was reasoned that the great functional changes must be due to an evolution of texture or change in chemical constitution or both.

But what have the studies referred to revealed? There is now no doubt about the processes of cell division being completed at birth. During the pubertal period the number of *mature* cells doubles, the new cells being developed from granules; and, according to the same authority, Kaiser, followed by Hall, "in the boy of fifteen, the volume of cell bodies is already, on the average, one hundred and twenty-five times their size at birth"; thus there occurs during a year or two of early adolescence a remarkable and significant cell development in the form of functional maturing and probably awakening of brain tracts hitherto dormant. All this accounts for the new instinctive tendencies and new emotional experiences, which come to occupy the center of the psychic stage and so largely dominate the conduct. But, while these important cell and tract developments are taking place, there is going on an equally important extension and ramification of the fiber processes, especially into the higher thought-areas of association. First come the tangential fibers, connecting the different parts of the cortex; then the systems of fibers among the cortical cells slowly evolve, the evolution of some continuing until late in life. It seems certain, also, that the later years of adolescence are almost as epochful as the earlier years, since the brain increases enormously in complexity after sixteen, the growth extending into regions that were less rich in early adolescence.

This rapid extension and developing complexity of the various fiber systems seem naturally to furnish the physical basis for the growth of intelligence which characterizes adolescence and takes the form of rational thought, higher logical correlation, independence in opinion, and esthetic appreciation. Thus it would appear that Aristotle was wise, without knowing the physical basis of his doctrine, in assigning fourteen as the age at which the education of reason should begin.

The correctness of all the inferences just made relative to the causal relations existing between known developments of brain structure and the rapidly maturing psychical powers finds much support in the fact that poor nutrition, from whatever cause, always checks the structural development of the brain and retards in a serious way nearly all mental growth; hence the inference that the two phenomena just described, not only parallel each other, but are causally related. Beyond doubt, the foregoing emphasizes the fact that this is the formative period of life; and we have, as James and others have pointed out, in this structural maturing of the brain the physiological basis of personal development; it is the time par-excellent to "help nature."

Now what is the relation between all this rapid physical growth with its accompanying development and the health of the adolescent? This is certainly a practical question for all who have to do with high-school pupils and high-school problems. The opinion seems to be pretty common that this is a critical period for the physical as well as the moral welfare of the individual, and in a certain sense this is true. The early years of adolescence are said to be "the grand court of appeal by which weak children are weeded out and only those who have sufficient vitality for life's battles renew their strength and continue their development." This statement applies, perhaps, more correctly to girls, for some of whom pubescence is a real physical crisis. In general there is an abatement of

the diseases of childhood and an increasing liability to the diseases of maturity; and statistics show a high percentage of ill health, but a low percentage of deaths. Both observation and vital statistics tend to prove that the vital forces have acquired a momentum considerably greater than ever before; consequently a very high percentage of both sexes pass through the crisis safely. The most effective way of measuring vitality is to compare the ratio of the number that live to the number that die at different ages. Dr. Hartwell's study of the pupils of the Boston schools shows that for girls the lowest death rate comes at twelve and for boys at thirteen, the ratio being about three hundred to one; while at the ages of eight and seventeen it is about one hundred and sixty to one. If for any reason the physiological maturing comes later, the characteristic vitality and health also appear later. Thus, for the time that is generally considered the most critical for health, vitality, as determined by mortality tables based on the Boston studies, is almost twice as great as at any other time from birth to maturity. Axel Key reached practically the same results from his study in the Swedish schools. However, vitality and good health are not necessarily concomitants at any time in life; many people live a long life of invalidism, and their robust neighbors die in their prime. At early adolescence the low death rate and the accompanying rapid growth, with the significant structural and functional changes, are but the outward expression of the deep-lying, strong, vital current, which at this time manifests a vigor unknown anywhere else in nature.

But, if one recalls the manner and conditions of physical growth during adolescence, it is not at all surprising that some individuals, more especially girls, are subject to various disturbances and minor ailments. The continuously varying and disproportionate growth of the different parts and organs of the body must naturally result in unusual strain and consequent tendency to functional derangement. The rapid

growth of the large muscles of the body incident to adolescence and the violent activity incited by this growth call for much additional nourishment and place a greatly augmented strain on the digestive and circulatory systems; disturbed digestion always brings its retinue of troubles; and, as we have seen, the heart, due to structural changes, is called upon to pump much harder than ever before, its work being frequently greatly increased by the naturally strong tendency at this time toward athleticism. Then, too, the new emotional life, based on the developing instincts, which sets in at this time, gives rise to many psychological manifestations which act as disturbing causes, these manifestations being thus both cause and effect. So it is that, while life's current flows strongest, the eddies and surgings of the stream are present, agitating and troubling the waters; great intensity of life with its compelling impulses is not naturally conducive to either physical or spiritual tranquility.

This chapter might come to a close here; for this ends the account of the marvelous and significant physiological changes and characteristics of adolescence; but it seems best to add a few practical inferences, although these will be developed more fully in the appropriate chapters of Part Second of this book.

The rapidly advancing science of medicine has discovered the cause, course, consequences, and cure for many specific diseases with which man has long contended in his struggle for existence; but it is a biological question that confronts us here rather than a pathological condition. The great floods of vital energy and the consequent exuberance and enthusiasm are likely to mislead teachers and parents, as well as the youth, into believing that he can endure anything. This is the time, too, when the individual, for reasons already explained, is especially susceptible to over stimulation of many kinds; there is a strong desire for intense states of mind, this tendency being reflected in the extravagant use of superlatives. Also the com-

plexity of modern life, with its increased industrial and social demands, has come to be responsible for considerable trouble; it certainly is at least a contributing cause of much of the ill health and physical derangements incident to adolescence, not to mention the wreckage of body, mind, and morals. However, there are good reasons for believing that all would generally go well if the vital forces were conserved and not allowed to overflow into the many side channels. The amount of energy present and in action is now very great, but the demands are also very great and extremely urgent.

It has already been shown that a comparatively early and somewhat prolonged pubescent period is better for individual development and is fraught with fewer dangers and less functional disturbance than one deferred to the middle or later teens, late maturing often leading to more disquietude and irritation and to a loss in development never completely made up. This, then, suggests a rule of conduct: prepare for an early and safe entrance upon adolescence by establishing and maintaining wholesome and hygienic conditions during preadolescence, when the mental and physical forces are naturally well adjusted to environment and there is little that tends to disturb the equilibrium of the self-centered individual.

From what has been said concerning the growth and changing composition of the bones, it would appear that the system during adolescence needs a differently proportioned supply of mineral matter; lime especially seems to be required, the effect of this demand showing in the "lime hunger" sometimes noticed. These special calls, to meet the changing needs of the growing bones, carry with them a practical suggestion concerning diet. And since the shape and development of the bones are affected by posture and strains of every kind, as well as by nutrition, much care must be taken with regard to sleeping, sitting, and walking positions, and any mode of dressing that tends to interfere with the natural development of the bones.

Because of the circulatory disturbances consequent upon the change of ratio between heart muscles and the size of the arteries with the resulting effects, the heart doubtless needs even more consideration than the changing skeleton. The fact that there is during adolescence serious danger of over-developing the muscles of the heart has recently been forcing itself upon experts of various kinds; this danger is greatest with boys. The seriousness of the derangement is not apparent until some time after the strenuous series of exertions causing the trouble has ceased and the demands upon the heart are again normal, there being usually no evidences of the evil while the heart muscles are building up. More will be said of this in Chapter XV, where practical suggestions will be made concerning its regimen.

Breathing capacity, or vital capacity, as it is often called, may be developed by proper exercise and training more than any other physical capacity. Chest and lung development is exceedingly desirable for the purpose of endurance and in order to be ready to meet the physical emergencies of life. Training in proper breathing, vigorous exercise of any kind in the open air continued for a reasonable length of time, and habitually good posture of the body will secure for any one the maximum development of chest and lungs.

Music teachers have long discussed the question as to whether voice training should continue with boys during the process of voice mutation. Opinions of the best authorities now pretty well agree with the findings and conclusion reached by Dr. Morell MacKensie in his *Hygiene of the Vocal Organs*; he believes that singing may continue without any bad effects if care is taken not to attempt very high or very low notes. It is unfortunate to neglect any training during this plastic period that will favorably affect the speaking voice; for, due to many causes that have often been discussed, American boys and girls are inclined to develop voices that are anything but effective

and pleasant. There appears a little later, according to Dr. Hall, a new vocal consciousness, shown by the great satisfaction that both boys and girls often exhibit in all kinds of vocal experiments, such as yodeling and passing abruptly from one pitch to the extreme opposite. The new interest in voice possibilities seems to point clearly to the notion that the time is ripe for the training so much desired.

The digestive troubles that sometimes appear during early adolescence should be transitory and unimportant, ceasing when their causes no longer exist; and it is believed that they would soon disappear if a plain and regular diet were maintained, instead of yielding to the capricious appetite characteristic of the period, which calls for many unwholesome articles, such as pickles and rich and highly seasoned foods. If these digestive derangements are allowed to continue, they become deep-seated and cause much misery and inefficiency throughout life.

In discussing nervous disorders of a functional kind, it must at once be conceded that the schools have been guilty of causing much harm, which better knowledge and practice must avoid. Much of the work of the modern school calls for an almost continuous use of the small accessory muscles, those that "wag the tongue and pen," to the exclusion of the larger muscles; and this, in the opinion of the experts, has led to the formation of a hundred or more automatisms, such as stammering, biting the nails, picking the face, winking, and grimacing, all examples of dissociated activities involving the use of the smaller muscles and indicating a lack of coördination and control. The rapid growth of the larger muscles during early adolescence demands much physical activity of a vigorous kind; the demand is strongly felt by both boys and girls; and their systems instinctively rebel against the fundamental muscles remaining inactive for long periods of time, and, because of the unnatural restraint, these automatisms appear, as it were, in lieu of the

much-needed larger movements. It seems to be nature's form of protest against the impertinent demands of the modern school. It is true that these automatisms are somewhat prevalent during childhood; but, as J. W. Slaughter urges, adolescence is the last chance to cure them; for during the rapid growth of early adolescence "the muscular system and its neural counterpart undergo extensive rearrangements." There are clearly two things necessary to keep matters right, considerable vigorous exercise of the larger muscles and much sleep; the best sleep comes from the fatigue of the fundamental muscles, "whereas fatigue of the accessory muscles produces that overwrought nervous condition which is a great enemy of sleep at all times of life."

In presenting these suggestions concerning the hygiene of adolescence, there has been an attempt to follow the best and latest that science has to offer; but it is a case where the promptings of common-sense relative to the best way of living are in close agreement with science. As we have seen repeatedly, adolescence is the formative period in the life of an individual in all matters,—physical, mental, social, moral—but in none is it more vitally formative than in the matter of health and growth; these condition all the others; science and common-sense both say, make health and growth paramount. The general rules of health, which have long been well known, apply admirably to the needs of the adolescent. To meet successfully the sudden strain of the period, the youth must have fresh air, nourishing and varied food, much quiet sleep, freedom from worry, regular, healthy work (if possible part of it in the open air), and a relatively large amount of wholesome social enjoyment. This all sounds common-place, but it is strictly scientific.

CHAPTER V

MENTAL GROWTH AND RECONSTRUCTION

An attempt was made in the preceding chapter to show that the maturing of the functions of sex is the central fact and driving power of all the wonderful physical growth and the structural and functional changes that characterize adolescence. It is important at this point to appreciate the significance of the fact that this physiological maturing, with the consequent physical growth and development, is, not only the background, but in a very fundamental way, the cause of the psychic growth and reconstruction now to be described. The appearance of the sex functions, the physical growth, and the mental development are closely connected and vitally bound together, so that any cause which retards or in any way interferes with either of the first two influences in a corresponding manner interferes with the third. The mental reconstruction which is due at this time is so marked and fundamental in its nature that the term "new birth" is still applicable, the only difference being that we pass from the realm of the physical to that of the spiritual. As Hall asserts, "the floodgates of heredity are thrown open again as in infancy;" if we accept the recapitulation theory, youth rapidly repeats the experiences of a "later and more human ancestry;" "heredity is bestowing its latest and therefore highest gifts;" hence this is the time when a new and unique mental life should be taking shape.

It was found, on the physiological side, that adolescence means, along with the general growth in height and weight, a more or less independent change in size and function of every part and organ of the body, the variation in rate of growth

being so marked that it would almost seem that first one organ and then another obtains a temporary monopoly of the supply of nutrition. When we pass to the mental life of this period, we find something quite analogous; psychic life, too, appears to grow in segments, as indicated by the erratic manner in which the intellectual interests and occupations of this period change; and this shifting of the mental focus may be taken as one of the characteristics of the phase of adolescence we are now to study. To the observer this frequent changing of the intellectual interests may have the appearance of whim or fad; but it is without doubt one of the laws of mental development during adolescence. While the interest holds, there is usually great concentration with its consequent advantages for mental training.

But more fundamental than this growth of the mind by sections is the entirely new attitude toward life itself which is manifested at this time. In six months the adolescent adopts new companions and indulges in new forms of amusement; the color fades from his juvenile sympathies; his intellectual curiosity is quickened and seeks new fields; he thinks new thoughts, and becomes passionately eager to understand the material and social worlds in which he finds himself; he wants to "get behind the scenes" and learn how the machinery works; new powers and faculties are born, which begin at once to play upon problems more complex or before non-existent; the old landmarks, which served so efficiently in his preadolescent days, are rapidly vanishing, and he instinctively and eagerly looks for new ones; life moves on a higher level, for early adolescence is "the infancy of man's higher nature;" and above all a new emotional life, naturally very ardent, makes its appearance. The boy has become a man; the girl has become a woman.

As already indicated, all this is so vitally dependent upon the change from an asexual to a sexual life that we logically

proceed to a consideration of the sex instincts which now appear.

Biological science makes a distinction between the structural and functional characteristics that are directly involved in the reproductive processes and those which are only accessory and aid the process in some indirect way; these are known in science as the primary characters and the secondary characters of sex. This scientific distinction is important in both psychological and pedagogical discussion respecting the influence of sex. The primary instincts are those directly concerned with race preservation and are not pertinent to the present study. But a knowledge of the secondary sex characters is important for this discussion, and especially from a pedagogical viewpoint. In general these secondary instincts are manifested in the form of attempted adornment and many modes of "showing off." The boy enjoys putting forth his best efforts in all forms of physical prowess when in the presence of the opposite sex: he runs faster, plays the game harder, and steps with a more manly and dashing stride. Girls, on their part, are more painstaking in their appearance: they walk and sit more gracefully, indulge in more smiles, and speak with softer and more richly cadenced tones. Each is naturally brighter and more alert when in the other's presence. Again, the desire for travel and in general the impulse to widen the social horizon, so characteristic of adolescence, are examples of the same secondary sex characters. It is not claimed that the individual is always conscious of the connection between these various accessory sex manifestations and his sex life; but the chief motor force is the developing sex instinct, and the real connections are readily seen in most instances by the student of these phenomena.

There is an interesting analogy between these secondary sex traits as they appear in the human family and what occurs in the animal kingdom at the mating season. Dr. Hall has called attention to how at this time the whole animal world becomes

more beautiful, and "life overflows in bright colors." Crests, combs, wattles, erectile hairs, horns, bright spots, increased plumage, and all the other adornments of animal life indicate "high blood pressure and increased tension of life" and "herald the spring-time awakening; and the air is full of the season's mating noises and sweet songs; almost every animal becomes vocal and many become charming because of new color or form."

Very interesting and subtle are the endless ramifications and irradiations of the sex instinct in mental life, but they must not be interpreted in any narrow sense. Without doubt for a time the influence of sex maturing naturally occupies in the mental life of the adolescent a central and dominant place; but, if his life is hygienic, his social surroundings wholesome, and if he has opportunities for normal self-expression, the instincts expand and become diffused, irradiating many allied fields and interests; they enrich the life in later youth and are the elements from which are built up the more pleasing phases of personality. These secondary impulses sometimes find expression in a new appreciation of nature, poetry, and art. It is at this time that "mother nature again takes her child upon her knee" and gives lessons necessary to the perfect rounding out of the individual. It is from this source that the finer human sentiments take their rise, and esthetic enjoyment and expression have here their beginning.

But life at this time is generally fraught with many perils as well as great possibilities. [Months of dangerous mental and emotional turmoil are not uncommon. Knowledge of self is less adequate now than at any other period of life; for the inner world is changed and continually changing, and the outer world has taken on new aspects, while the ego is trying to find a new center. The intellect, although rapidly gaining in vigor, is far from supreme at this time; it is darkened by the storm-clouds of new sensations and strange passions,

and desire often betrays the judgment. Moreover, the mind is doubtless pushed and pulled by the old desires and ancient hates of ancestors that many thousand years ago struggled for a higher human life. And, most unfortunately and inexcusably, all the adolescent tastes and instinctive tendencies have been commercialized in many harmful and attractive forms: the public dance-hall, with its dangerous associations; the cheap, sensational novel, with its vivid suggestiveness; the low-class theater, with its immodest costumes and questionable plays; and other institutions that are worse. All these stand ready to influence the thinking, if not the conduct, of adolescents for whom they were ingeniously devised.

Because for several years so many mental processes center in sex and its functions and thus endanger the adolescent, it is very urgent that those responsible should be alert to see that the normal course of development is not thwarted and that the sex susceptibilities and impulses of the period are "long-circuited," as Hall expresses it; that is, that they are dispersed by providing abundant opportunities for safely satisfying the expanding nature. This can often be done by carefully managed athletic competition, wholesome literature that really appeals, work in debating, musical organizations, dancing under proper conditions, and any other form of activity that will keep the mind healthfully occupied and make the proper social appeal. But it must be admitted, as Jane Addams suggests, "It is neither a short nor an easy undertaking to substitute the love of beauty for mere desire, to place the mind above the senses; but is not this the sum of the immemorial obligation which rests upon the adults of each generation if they would nurture and restrain the youth, and has not the whole history of civilization been but one long effort to substitute psychic impulsion for the driving force of blind appetite?" In order to be ready and competent to render to rapidly developing youths the services so much needed to guide their mental life into safe and

fruitful paths, it would seem necessary, as part of the equipment, to have a thorough and sympathetic knowledge of the psychology of this critical period; and it is hoped that this and the next two chapters will aid somewhat in giving this knowledge. Sex education is discussed in Chapter XVIII.

There are many peculiar and seemingly anomalous examples of the long-circuiting of the sex instincts, already referred to, that emerge at puberty and develop during adolescence. Some of these long-circuitings take the form of sex charms and fetishes, of which Dr. Hall gives a full and interesting account. The characteristics which tend to arouse the strangely compelling likes and dislikes of this period of sex susceptibility are frequently the most trivial matters, but they always seem to have to do with personal appearance in some way. It is understood that the traits or features classed as charms or fetishes do not in any way affect their possessor biologically. According to the study of these secondary qualities made by Hall, the traits mediating for sexual attraction on young men or women in their teens stand in the following order: eyes, hair, stature and size, feet, brows, complexion, cheeks, form of head, throat, ears, chin, hands, neck, nose, nails and fingers, shape of the face. The tastes at this time of life are often strangely specialized; a large per cent lay much stress upon the color of the hair, or the length of the eye lashes, or the condition of the finger nails or teeth, or the contour of the neck, or the manner of walking, or the quality of the voice, or the mode of laughing, or some other trait or feature just as non-essential, yet constituting the basic material for romantic love. Hall's study shows also that dislikes are just as striking and their basis equally trivial; they include features, ways of dressing, personal habits, and mannerisms.

The skilful novelist makes his readers aware of how strangely the adolescent's mind moves in these matters, how powerfully they influence him, and how they are woven into his ideal of

personal beauty and attractiveness; thus in the carefully written descriptions of the heroes and heroines particular mention is made of many insignificant details; these details are exhibited, not as they affect people in general, but as they dominate the mind of the one who is coming under the influence of their possessor. The probable explanation of these seemingly absurd special preferences and strange whims of the adolescent is that they are associated unconsciously with an attractive personality of the opposite sex and "instinctively organized as parts of a larger whole," thus becoming fused and identified with the personality; that is, the peculiar influence, which sometimes amounts to a sex fetish, is due to its setting rather than the trait or quality which appears to constitute the charm.

Furthermore, these traits which were during the earlier part of the period objects of direct attraction frequently become greatly modified or even reversed in their influence over the mind, so that the final choice of a life companion may fall upon an individual with an opposite set of qualities and characteristics from those which constituted the more youthful ideal; this modification or reversal is likely to occur as the end of the adolescent period approaches. This phenomenon connected with the long-circuiting of the sex instincts appears to support the explanation of the erratic workings of the adolescent mind offered in the preceding paragraph. At any rate, because of the strangeness of the whole matter and because these aberrations are more or less evanescent, the degree to which they enter into the psychology of adolescence is probably not generally appreciated by the mature mind.

It is without doubt due to the sex instincts, manifesting themselves in an indirect and unconscious way, that one of the frequent symptoms of developing adolescence is the impulse, sometimes very strong, to seek new environment. Although this is an extremely complex impulse, it is classed by psychologists as an instinct. How much of the activity that is gener-

ally attributed to this migratory instinct is due merely to love of adventure and restless desire for action is difficult to determine. Teachers and parents are aware that during early and middle adolescence attacks of "spring fever" are more liable to occur than at other times, and that this characteristic unrest shows itself in the form of truancy and other irregularities, which indicate only too clearly that youth is not naturally tolerant of the restraints and routine of the schoolroom and the home. The impulse is so strong and the yearning so great and sometimes so protracted that it is a veritable wanderlust and has without doubt an instinctive basis. It has been suggested that, because this migratory instinct is so common and often exercises such a controlling influence, the high school may well turn it to account by planning educational trips and excursions of various kinds; these can easily be made to contribute much to the school work in science, history, and geography. In the German schools such trips have been organized as a regular part of the school work; and this has been done to some extent around Boston and central New York. This may well be undertaken where the school is located near places of literary, historic, and geological interest. At any rate, this migratory instinct, which is best accounted for as a ramification of the sex instinct, is present and often impulsive, and the teachers and parents who are wise and sympathetic will make the most of it.

In general we may be sure that the more ways that the all-compelling sex instincts can be long-circuited and interwoven with other life interests and made to irradiate the whole life and personality, the safer and better it will be for the individual. There are clearly great possibilities which lie in this direction, possibilities for enriching and beautifying the character, as well as serious dangers which result from a focusing of the impulses natural to this time of life.

At the same time that these deep-seated sex developments,

with all their vital and far-reaching consequences, are going on, there is taking place an unfolding of the senses and their manner of functioning, which, though not as striking and mysterious, is very important to the work of education. At the time that E. G. Lancaster published the results of his well-known *questionnaire*, it came to be believed that there is a conspicuous sharpening and strengthening of the senses during the period of adolescence; but laboratory experiments do not confirm this theory. It is true that the adolescent sees, hears, and feels in a way that is new to him; this, however, is not necessarily due to any change in the structure or functions of the sense organs, but is due largely to the new emotional setting which the exercise of the sense organs comes to have. The "new aspects of beauty" which come to youth with so much potency and make him feel frequently that he is living in a new world do not have their origin in any organic changes in the retina or crystalline lens. The change is subjective in the fullest sense of the term. The thing that has really happened is the same in character and origin as we have in Wordsworth and the other nature poets when they see in the fields and woods and brooks the changing moods which they describe so vividly and sympathetically; many adolescents are for a time young poets. When the girl at seventeen hears the chiming of bells three miles distant, we must not infer that her organs of hearing have become more acute; it means that power of attention and interests have changed; the modification is central instead of peripheral; her attitude in this instance, as in many other matters, has changed.

Whatever may be the true explanation, whether central or central and peripheral in its origin, the senses undergo such a marked change in their manner of functioning that it is pedagogically important to understand and utilize this awakening. All artistic and creative success in the last analysis depends upon carefully and accurately trained senses; and the training to

be most successful must occur at the time when the various sense organs are most plastic; and the training should be based on an accurate knowledge of the real nature of the changes going on. It is said that if a young duck is kept away from the water six months it will never learn to swim; the water-seeking and using instincts will die. Those arts which require the highest degree of efficiency in the use of the senses must be cultivated during the nascent period of sense development, otherwise it is a case of keeping the duck away from the water. Furthermore, psychology has long taught that the higher processes of mental development are closely and causally connected with the evolution of the senses. Hence the next few paragraphs are devoted to a description and discussion of the quantitative and qualitative changes in the functioning of the various senses during adolescence.

First, with regard to touch; there appears at pubescence "a new kind of dermal consciousness." There is a tendency to give increased attention to the skin; it was probably due to this changed interest in dermal sensations and conditions that the ancient Romans and Orientals developed at adolescence such a passion for the bath and unguents. During the early years of adolescence a muddy complexion and eruptions of the skin are rather common, especially with girls that suffer any abnormality in their development. There often comes with this roughness of the skin a strong desire to remove the cause; hence, is formed the disagreeable habit, sometimes almost irresistible, of picking at the skin and pulling out hairs regardless of the irritation or pain that may result. The glands which supply the skin with oil and moisture become more active at puberty, and the skin becomes more glossy, thus affecting the personal appearance at a time when it naturally receives much thought; this frequently gives rise voluntarily to new habits of bathing and use of cosmetics. Also there is likely to develop at this period marked likes and dislikes for contact with others,

which occasionally take the form of permanent idiosyncrasies. The feeling of smoothness and softness in connection with the skin of others frequently develops into an exquisite sensation and there comes with it a strong desire to supply stimulus by hand-shaking, patting, stroking, and caressing. Sometimes strong and sudden likes and dislikes, that seem to be deep-seated especially with girls, have their origin in a sensitiveness to the quality and texture of the skin; hence for some people at this time promiscuous hand-shaking, as at a reception, is very distasteful. Again, this newly awakened dermal consciousness brings about a changed feeling with regard to dress and the exposure of parts of the body; the new sentiment may be either to cover or to uncover in a way hitherto not desired. Closely allied to this matter under discussion, and arising from the same cause, is an augmented consciousness of anything that in any manner affects the contour of the body. As to skin hygienics, Dr. Hall recommends a rugged life with vigorous stimulating of the skin in almost any way, especially frequent cold baths and much use of rough towels, as tending to prevent the focusing of consciousness on sex organs and functions, and contributing to the general health, happiness, and well-being of the individual.

The sense of taste, which has so much to do in determining what kind and form of nutrition the body shall have, comes to have a much wider range during adolescence, and the appetite is liable to become more capricious. The latest studies of metabolism seem to indicate that each cell and tissue of the body has its own specific hunger and that appetite, when not perverted, is a general summing up of all the consequent cell-cravings; this explains the new likings that appear at this time. More food is needed to furnish material to the rapidly developing tissues; and, because the relative rate of growth of each part varies in such a peculiar way, as we have already noted in the preceding chapter, the relative demands for the different

food elements also vary in a peculiar manner and with each individual. Milk, which is often taken with pleasure and in large quantities, becomes distasteful, and more solid food is desired. The increase in the size of the jaw-bone, already mentioned, and the enlarging of the muscles of mastication better aid in preparing the new foods. It is even said that the prevalent gum-chewing habit culminates at this time and affords work for the developing muscles. Extreme likes and dislikes in the matter of food are likely to arise; nearly always more animal food is wanted, also foods with a bitter taste; and the tastes for both sweets and acids are changed, sometimes increased and sometimes decreased. New articles of diet become interesting and must be tried; and there is often an unsettled period when tastes are fluctuating and even freakish. All tends toward the establishment of a new equilibrium with larger variety as its basis. There is, too, at this time a tendency to determine choice of food by psychic notions; often because of social or supposedly hygienic reasons new tastes are cultivated by sheer force of will; many people have to learn to like green olives, ripe tomatoes, and oysters; and these tastes are usually cultivated during the early teens. But there are unfortunate tendencies connected with the changing tastes, as well as with nearly all the changes incident to adolescence. Stimulants, narcotics, and condiments are often passionately desired. This tendency is probably due as much to the increased nervous tension and fondness for novel sensations and experiences as it is to the changing demands of the developing organs. There is, also, frequently a tendency to irregularity in the time of eating and the quantity of food desired. Notwithstanding all these troublesome tendencies, a well-balanced and comprehensive dietary is especially needed at adolescence; for every organ and tissue must be able to get from the blood which flows through it the kind and quantity of nutriment it requires for its upbuilding, and, as we know, the needs are great and vary-

ing. The eating habits should receive attention. Hygienic considerations demand that aversions which interfere with a broad and balanced dietary should when possible be overcome; the appetite must be kept true to the needs of the body if the demands of the higher metabolism are to be met; and it is difficult to adopt a new food after physiological maturity.

The sense of smell, which is usually so undeveloped in the adult, is closely connected with and often greatly influences taste. It is most exquisitely developed in girls at the beginning of puberty; and boys from fourteen to eighteen are more sensitive to all odors except musk. This is the time, especially with girls, when the fragrance of flowers gives more pleasure, and is more finely discriminated, when there is an increased interest in perfumes, girls being very fond of perfumed writing paper, handkerchiefs, and soap, their tastes in these matters varying greatly. There is much evidence that tends to prove that the associations of this sense are strong and deep, although often subconscious; a bad breath or other disagreeable personal odor may blight a friendship. Thus even the sense of smell comes to have a social outlook at this period, and like the other senses and faculties, exhibits greater alertness and sensitiveness.

In early adolescence, when the voice is changing, there comes a new vocal consciousness. As the voice increases in range, it is probable that the scale of audibility falls slightly, some of the higher notes losing their power to please and the lower ones gaining appreciation; this experience was very marked with the present writer. This of course is entirely different from the ability to hear high notes, which reaches its limit in the early years of adolescence. Lancaster found that in the case of 464 out of the 556 young people studied there was an increase in the love of music, a new fondness for rhythm and melody, the pleasure derived culminating at fifteen and dropping off rapidly after sixteen. The interest in music which

suddenly develops at this time occasionally amounts to a passion; young people buy musical instruments, voluntarily become enthusiastic about music lessons (usually very irksome to children), and are filled with the notion that a great musical career is before them. For those who have already gained some proficiency in music there awakens a new interest in "the concourse of sweet sounds" and they think of this new talent as a means of giving expression to feelings and emotions otherwise unutterable. In a large majority of cases this enthusiasm is extremely transient, lasting but a year or two. However, those who have real musical ability make wonderful progress during this period. Although much can be done toward mastering the technique of musical performance during preadolescence, adolescence is the time for the great soul-awakening influences of the world's masterpieces; for the synthetic powers of the mind are now able to unite the many parts of these compositions into one harmonious whole, and there comes now a new responsiveness to accent, timbre, and cadences (the soul-qualities), and to the language of music in its larger aspects. There seems to be deep significance, suggestive of fruitful possibilities, in the concurrent development of the new vocal consciousness and this increased responsiveness to the influence of music; there is clearly a close connection between the ear and the emotional life, which during adolescence is so much of life. It forcibly presents a double possibility, (1) the possibility of long-circuiting some of the troublesome vital energy that is now developing and with it irradiating the whole nature of the individual, thus safe-guarding and enriching him in his time of turmoil, and (2) the possibility of cultivating individual talents and powers and bringing to light elements of personality which can be reached only at this time. Without doubt music, like other forms of art, tends to create the same emotional states which produced it; thus the spells which the best music casts and the raptures which it stirs would seem

naturally to be a harmonizing and tranquilizing influence, making for pleasure, safety, and richer character.

It is well to note in this connection that the adolescent often becomes especially sensitive to the sounds in nature and responds to them in ways that are entirely new. At this time, as one of our American poets during his adolescence sympathetically expressed it,

“To him who in the love of nature holds
Communion with her visible forms, she speaks
A various language; for his gayer hours
She has a voice of gladness, and a smile
And eloquence of beauty, and she glides
Into his darker musings, with a mild
And healing sympathy, that steals away
Their sharpness, ere he is aware.”

The emotional response to the sounds of nature here described by Bryant, when she speaks the language of the heart, is another symptom of the poetical awakening that may come with dawning adolescence.

The way in which the power of vision unfolds during adolescence is pedagogically suggestive. At the age of fifteen, the judgment of form is most correct, boys being more accurate than girls; whereas from six to ten, girls are more accurate in their judgment of form than boys. According to studies made by Griffing, the maximum number of letters seen at one time increases rapidly from puberty to maturity. All visual estimates improve and show closer relation between retinal sensations and psychic processes. There appears at this time much greater power to discriminate the finer differences in faces, and other personal features such as style of walking and fit of clothing; this is without doubt due largely to modification of interests. The social and esthetic surroundings take on new interest and meaning; and there comes a power to discern beauty in symmetry and proportion, and things are perceived in larger units. The adolescent often revels in color, which

makes a stronger appeal than mere form and proportion; the hues of things in outdoor nature, like their sounds, give increased pleasure and take on new meanings, sometimes becoming suggestive and symbolical. What was once mere fields, hills, and trees now becomes scenery to be admired, enjoyed, and described. Chromatic sensibility reaches its maximum of acuteness in girls at sixteen. This sense is frequently satisfied only by bright colors and striking contrasts, the taste for delicate tints and subdued tones appearing later. During early and middle adolescence color preferences often change and are sometimes reversed; to the present writer certain shades of green give the most pleasure, whereas during preadolescence green was the color most disliked. This development of the visual sense and this lively interest in all that appeals to the eye clearly suggests that this is the time for effective artistic training; in the earlier stages of the work the emphasis should be given to color and color effects; the sense of beauty that lies in form, proportion, and symmetry may later have its "in-ning." At any rate, it is important that the instinctive interest in color and form which now appears should be made to bear normal fruit by timely and suitable training in some kind of art.

These are some of the developments in sense perception that occur at the beginning of or during adolescence, each sense and its corresponding organ maturing in its own characteristic manner. But there are many general characteristics in the evolution of sense perception at this time. Before adolescence, sense stimuli tend to reflex action, whereas adolescent development is in the direction of delayed and better organized responses to stimuli. There is a noticeable increase in the associative functions of the mind; there comes to be more deliberation and reflection; the material brought into the brain through the various senses is worked over, as it were, and elaborated before the finished product is returned through the efferent

system; as science expresses it, there is greatly "increased cerebral irradiation," and this naturally reacts upon the sense organs and causes them to function more perfectly. What happens may be compared to a great manufacturing plant exchanging a mechanically-minded, routine-regulating superintendent for a man full of initiative and originality and able to elaborate and profit by his experiences; the workers at once become more efficient and show new interest in their performances. Besides this increased elaboration of the sensations, there is an increased tendency to project the sensations, and along with this objectification of the sensations comes new possibilities for enjoyment; the discomforts, also, as well as the pleasures, resulting from sense experiences are more keenly felt. Moreover, there is little doubt but that there is built into the sensorium during adolescence the power to discriminate many new sensations. Külpe claims that about 14000 is the maximum number of different sensations that can be distinguished; and there probably comes at this period of reconstruction many changes in the relative psychic importance of the various sensations.

All this awakening and elaborating of the sense organs and sense experiences can be understood and interpreted as one of the secondary sex characteristics; for, as sex life develops, the growing organs send to the brain a new and confused mass of sensations, at first, perhaps, not even localized, which give to the individual the characteristic feeling of intensified existence.

The following statements by Dr. Hall emphasize the more important general features of sense development during this period and indicate the practical aspects of the subject for those who deal with adolescents. "Adolescent years mark the golden age of sense, which is so prone to become sensual if uncontrolled. Then the soul exposes most surface, as it were, to the external world. The eye gate and ear gate especially are open widest,

. . . so that the possibility of knowing our world and acquiring experience on the one hand, and of lapsing to a life of indulgence [on the other], are now most developed." "Every centripetal nerve glows and tingles with new life, and every in-going fiber is freighted and even gorged with the traffic of impressions. Never is the body so imperiously dominant and so insistently in evidence, and never is the external world so ineluctable and impressively real, as in this impressionistic age. Never is objective and subjective experience so vivid and manifold. Youth is in its world, in the closest *rapproch* with it possible to man. . . . All this is his right and his necessity, only it must neither lead to perversion or become so overwhelmingly absorbing as to cause arrest or degeneration." The pedagogical import of all this is clear and impressive: the adolescent has such urgent claims upon the external world and so rapidly are these claims filed, that one must realize that "now is the accepted time."

The psychology of adolescence would be strangely incomplete without an account of the development of the sentiment of love, for its development is the most vitally significant and characteristic phase of the whole period. R. S. Bourne says: "Youth expresses itself by falling in love. . . . The youth is swept away by a flood of love. He has learned to value, and how superlative and magnificent are his values!" Bourne here points out the tendency of a force that may remain latent, and he suggests the impetuosity of that force when it becomes active. Although this sentiment sometimes appears suddenly, comes from the depths of a young life, and for a time sweeps everything before it, in organization and manner of development it resembles the other sentiments based on instinct, the only difference being the motor-force behind it. For conditions of growth this sentiment, as Slaughter has pointed out, depends upon "a succession of emotional experiences in relation to an object;" in this it is like other sentiments based on

instinct. The relation between the sexes, with all the complex and subtile irradiations, certainly involves the whole psychological field; but a description of this is not attempted here; our interest is in the irradiations and the indirect but powerful influences which have love for their source. It may be asserted at the beginning that there is no such thing as a typical development of the sentiment of love. The brief account of the stages or kinds of love which follow is based on the studies of Sanford Bell and others as reported by Dr. Hall in his *Adolescence*; these studies seem to have influenced recent writings on the subject.

The first form of love between the sexes, if such it can be called, is the infantile love which appears before the age of eight. It is in the nature of a fondness for each other's company, is transparent, entirely lacking in self-consciousness, free from shyness, seems to be sexless, and the purest sort of temporary affinity; thus it may be called Platonic. Little gifts, especially things to eat, are exchanged; and a mild form of jealousy may appear in connection with it. Whatever this manifestation may be or whatever its origin, it is probably "exotic, like infant piety;" it is possible there is an element of imitation in it; and it is probably not instinctive in any strong sense. Both science and common-sense suggest that these little love-like performances should be ignored by adults or at least not encouraged; they may be amusing, but so far as is now known, they have little significance and are transitory when elders are wise enough to leave them alone.

The next stage is juvenile liking, which makes its appearance during the periods of preadolescence and early adolescence, some time between eight and fourteen. Biologically this stage is very interesting; it is the human counterpart of the mating season of animals. The developments at this time are self-conscious and frequently secretive. Now appears for the first time a keen interest in some one of the opposite sex; but we

must not expect this interest to be openly avowed; these sentiments of affection are expressed by indirect and covert ways. It is the age of motto candy, keepsakes, valentines, picture cards, and the like. It is the age, too, of love games, for these make an opportunity for giving expression to the feelings of the participants under cover of the game. Among the eighty-three games played by the Washington children, Babcock found thirty love games, in which the charm seemed to be choosing a partner and expressing in some way under the rules of the game the sentiment which the players naturally conceal. It is the stage of love that furnished the motive for Whittier's poem "In School-Days." At this time the boy suddenly begins to give heed to his personal appearance; his mother's habitual reminders with regard to combing his hair, brushing his teeth, and cleaning his shoes are no longer needed. In the days of chivalry the knight tilted under the rules of the tournament in the presence of his lady-love; but our hero contents himself with showing off when trying to attract the favorable attention of some girl of his age. He talks loud, indulges in horseplay, scuffles, turns somersaults, hangs by his legs from trees, seizes and handles roughly without provocation some boy that happens to be at hand, or performs some other antics that he thinks will command attention and be admired. In the meantime the girl on her part assumes an attitude of indifference; if she vouchsafes any attention, she gives it furtively and from a distance, although sometimes, contrary to what is generally expected, she is less guarded than he is. However, all the time she sees and understands the whole situation. This is the stage of love that breaks out in the springtime, for which there is probably a biological reason. The adult's attitude toward it is frequently one of annoyance; but the tactful teacher or parent can easily make use of this juvenile sentiment to secure better work and conduct.

There is another form of love that sometimes appears at this

age or even later; it is the juvenile affection for an older person of the opposite sex. On the part of the younger person there is great admiration and fervent devotion; while on the part of the older person there is usually sympathetic and kindly treatment. From the standpoint of biology this form is not easily understood, but psychologically it is very interesting. It is usually characterized by less fickleness while it lasts than the liking of boys and girls of similar age, due perhaps to the mature stability and constancy of the older person, who for the time being serves as an ideal for the younger. This phase of love should always be thought of and treated as transitory. This form appears most frequently in the sentimental attachment which a young boy develops for his teacher if she is an attractive young lady; he will gladly forego play and the society of his mates and remain after school to render a possible service; he frequently overwhelms the object of his affection with gifts of flowers and fruit; and he is in every way thoroughly devoted. Although difficult to understand and in a way unnatural, the situation can easily be made an opportunity for much helpful influence; for the older person, when strong and intelligent, can aid in fixing high ideals, especially by living a life worthy of the conscious or unconscious imitation of the youthful admirer. It is possible that the situation may develop into a lack of independence and a condition of parasitism on the part of the younger person, and this at a time when there should come considerable independence of thought and action; this is of course unfortunate, for it interferes seriously with personal development.

The next stage in the development of adolescence so far as the sentiment of love is concerned is not so clearly defined; and there is less agreement as to the exact age to which it should be assigned, some writers claim that it belongs to early adolescence. The period is marked by a strange tendency of the sexes to withdraw temporarily from each other. The boy

sometimes becomes ashamed to associate with girls, as this would seem to interfere with asserting his manhood, and many strange and new interests are now absorbing his attention. He has new problems to solve and there are new views to be clarified. Hall calls attention to the fact, that "nearly every known primitive race now isolates the sexes for a time from each other, and perhaps this ancient practice now appears as an instinct which reënforces the necessity for a period of restraint." At any rate, it is a time when boys find masculine company more congenial; at this time boys argue the disadvantages of coeducation. This tendency to withdrawal does not appear quite so strong or well marked in girls, yet it is at this age that girls often choose the life of the convent. Pedagogically it is a period well suited to cultivate and develop in boys all the peculiarly manly traits and virtues and in girls the finer and gentler womanly qualities, the traits and qualities which give to the later adolescent of either sex so much charm.

The final stage in the development of this sentiment under discussion comes toward the close of adolescence. Now "the age of love, in the full and proper sense of the word, slowly supervenes when body and soul are mature." The sentiment now takes on a fuller and richer meaning; biologically and psychologically adulthood is the true mating time for human beings; but it does not come within the scope of a book dealing with high-school adolescence and problems incident to secondary education to describe or discuss this last stage in the development of love.

We now pass in our study from these interesting realms of instincts, sensations, and sentiments to the realm of thought. Mental maturing in the individual always follows and requires more time than physical maturing. It has been shown in a preceding chapter how great is the variation in maturing on the physical side; there are marked variations as to age, time required, and manner of unfolding; therefore it cannot be other-

wise on the mental side. In general it must be kept in mind that variations appear repeatedly as one of the laws of adolescent growth and development.

There comes a time in the life of many early adolescents, generally pretty closely associated with the pubertal period, when it would seem that the rapidly occurring physiological changes interfere for a season with the remarkable development of the brain which is about due; so it happens occasionally that there is a brief period, lasting a year or more, of comparative stagnation on the mental side. The new physical impulses, which are not yet understood, seem to keep the mind in a state of uncertainty. Some observers believe that this happens more frequently in the case of girls; some bright girl will show temporarily a strange and annoying denseness and stolidity. This period of unresponsiveness is likely to come between twelve and fifteen. The unquestioning responsiveness and frankness of childhood and the simple and efficiently organized mental life of preadolescence have passed, and the stimulating and sustaining forces of youth have not become effective. Bourne speaks of this time as "a trying period when the child has become well cognizant of the practical world, but has yet no hint of the gorgeous colors of youth. At thirteen, for instance, one has the world pretty well charted, but not yet has the slow chemistry of time transmuted this experience into meanings and values. . . . At no time in life is one so unspiritual, so mere animal, so much of the earth earthy. How different is it to be a few years later!" As another writer has expressed it, "they lack the docility of childhood and the fine idealism that comes to most young people soon after puberty." There seems to be no period in the whole mental life of the individual less understood, and there is certainly no period more in need of sympathetic interpretation and treatment. It is a phase of adolescent development difficult to understand, because it is a time more than any other when the youth in-

stinctively withdraws into himself, and often masks behind an air of indifference. Because he has not found his mental bearings, he feels that he is likely to do or say the wrong thing; so he does or says nothing, or, what is more disconcerting and irritating, he says or does some inane thing that makes him appear foolish or obdurate. These are the years when pupils, especially boys, are in danger of dropping out of school; or, if they remain in, they may lose a grade. It is a time for patience, firmness, and sympathy on the part of parents and teachers. Fortunately many adolescents seem somehow to escape this period when physiological maturing appears to side-track for a time the expected mental development; and these fortunate ones enter more immediately into that wonderful intellectual and social awakening, when the mental vigor, glow, and enthusiasm of life seem ready and able to sweep all before them.

It is this marvelous intellectual awakening and reconstruction that we are next to consider. Lowell had in mind this inspiring phase of unfolding adolescence when he wrote:

"And every hour new signs of promise tell
That the great soul shall once again be free,
For high and yet more high the murmurings swell
Of inward strife for truth and liberty."

The signs of awakening and maturing mental life are numerous. New fields of thought are opening, and whole realms that before had no interest are becoming for the developing youth veritable fairylands into which he enters with wonder and enthusiasm. ✓The maximum memory span is reached at sixteen or seventeen. Perhaps most characteristic of the mental life of the period is the rapid growth of the power to reason, so noticeable is this growth that reason is often thought of as an adolescent faculty. As Dewey has pointed out, thinking becomes of "a more comprehensive and abstract type than has previously obtained;" and the cruder logical processes begin to attract

and give satisfaction. This is the time when youth first thinks what seem to him "great thoughts;" and it is perfectly natural that he should think them to be great thoughts; for they are so new, so strange, and so significant as compared with any previous thought experiences, and the enthusiastic young philosopher has no way of knowing that his thoughts are old, perhaps, as human reason. Then, too, his power of thought as a rule greatly outruns his powers of expression, and he often longs ardently to express himself; this very disparity of powers, which is itself a temporary shortcoming, increases the impression that his must be great thoughts; he might fittingly adopt the words of Tennyson, —

"I would that my tongue could utter
The thoughts that arise in me."

He has come to love intense states of mind. It is the "spiritual drunkenness" of which Plato tells us.

This widening of the range and increase in the complexity of the thought processes doubtless have as their physical basis the extending of many neurons into the new area of the central nervous system. This development of new or latent brain cells with their attached fibers so closely parallels the increase of ability to deal with more elaborate and difficult concepts that there can be little doubt of the causal relation.

This rapid growth in the power to think and the consciousness of it naturally lead to much youthful confidence relative to the conclusions reached, hence the characteristic tendency toward intellectual independence, a tendency which often proves somewhat irritating and troublesome to deal with on a practical basis. It is the time when youth wills to do his own thinking, and the one who tries to do it for him makes a pedagogical blunder; the only psychological method of procedure is to try to guide his thinking. The safe motto is, "Come, let us reason together."

Because of this new instrument of thought and the satis-

faction he finds in its use, the adolescent, more particularly the boy, assumes a questioning and doubting attitude toward nearly all things. This critical tendency is so marked that this is often spoken of as a skeptical period; and it is quite certain that nearly all of the world's greatest minds have been obliged to pass through this doubting and questioning experience when they first faced the problems relative to the inner meanings of things. And why should it not be so? The child is naturally imaginative and credulous and ready to act on suggestion; the preadolescent is usually satisfied if his ideas and methods fulfil the pragmatic test of working successfully; so it is left to the adolescent with his new-found powers to discover the ultimate truth and the reasons for all things. The exercise of the higher mental processes, which have now come to be so interesting and the results of which seem so vital to youth, is the natural and only means of mental growth; hence this tendency and these powers must be given scope and an abundance of worthy material on which the unfolding powers may be exercised.

✓ Another characteristic of adolescence is that it is a time of dreams and reveries; it sometimes happens that, notwithstanding the strong social proclivities natural to the period, youth seeks solitude, where he may indulge in his vague graspings for new and great ideas. Things come to have for him a sense of mystery. Sometimes he seems to exhibit the traits of the poet, sometimes those of the genius. Longfellow, recalling his adolescent years spent in "the city by the sea," gives us a simple statement concerning his youthful moods and aspirations.

"I remember the gleams and the glooms that dart
 Across the school-boy's brain;
 The songs and silence in the heart,
 That in part are prophecies, and in part
 Are longings wild and vain."

While the poet was living through these experiences of "the heart," they seemed prophecies, later only vain longings. Youth, as he suggests, has its moods of elation and depression (due often to physiological causes), "the gleams and the glooms." Adolescence is the time when the individual first begins to project these temporary moods and feelings upon nature, assuming toward it for the first time an emotional attitude; hence nature makes a new and strong appeal. Perhaps, of all the phases of adolescence, this is the most marvelous and unique. The sensations and sentiments which sometimes flood the stream of life are so indistinct and ill-defined that they are little more than vague and inexpressible yearnings, mysterious troubling of the waters, diffused raptures and seasons of nameless joy, alternating with depressing periods of misgivings and unrest. These vague, evanescent, mysterious moods and promptings, which seem to place the individual in a class with poets and geniuses, are explainable, like the other mental traits of the period, by physiological causes; it is thought that they are but the irradiations of the rapidly developing sex life, secondary sex characteristics, which disappear when certain physiological processes cease. They are believed to be the result of the inward traffic along the sensory tract toward the sensory parts of the brain of confused masses of sensations and impressions, having their origin in the maturing sex organs and functions. Thus, in a certain sense, poetry, art, romance, and even religion, all that is highest and most characteristically human, proceed from a physical basis. The implications at this point are clear; from this physical maturing all greatness takes its rise, and the most must be made of it.

✓ It follows from the above that emotion and enthusiasm of ten make up the major part of the mental life of the adolescent; deep, passionate interest in all things that touch the individual is now natural and an encouraging sign, as belonging to a

deep and rich nature; the chronically flippant and blasé attitude toward life, which frequently appears, argues a shallow and empty character in every way disappointing and discouraging. The proverbial enthusiasm and optimism of youth are both causal and consequential, and fortunate are the adults that can live in sympathetic accord with so much that is vital and inspiring; Socrates, the most human of the old philosophers, always sought out the companionship of the Athenian youth.

It is easily understood that, with all this rapid and irregular increase of the mental powers and the blending of the changing mental states with the new emotional elements, there must naturally be considerable lack of intellectual perspective; the adolescent must not be expected to see everything in its due proportion or to evaluate facts and experiences according to adult standards. His idealism is frequently crude and vague, and his unwonted vigor will many times carry him beyond conventional bounds; but these are not symptoms that should disturb us. This emotional idealism and this enthusiasm are not to be killed in the bud or in any way allowed to miscarry, for they are the unfoldings of a larger life.

This concludes our account of the mental growth and reconstruction due at this time. It remains to draw a few practical conclusions.

Because youth feels so keenly the force of the on-rushing vital currents of his new life, he is liable to be oblivious of the limits and checks which nature and experience provide, hence his tendency to overdo in many directions. This adds to the nervous strain incident to the period, thus endangering health and possibly resulting in a stunting mental precocity. What can be done? This is the time when all the powers must have scope. Health and safety both call for guiding and suggestive, rather than imperative, methods of procedure; and the mental

regimen must be carefully planned to meet adolescent needs and interests if there is to be assimilation and the consequent growth and development. So far in our account, growth of mind has been described largely in terms of itself; but there is also growth in terms of the educational materials that are at hand. The developing physical and mental powers both point to this as the period for acquiring both mechanical and artistic skill; but over-precision and great stringency must be guarded against. The adolescent naturally focuses on matter rather than form; and his sensibility is easily dulled and his enthusiasm dampened by hypercritical handling. ✓Anything that savors of dullness or lack of life is unpardonable in those who are directing the interests and efforts of youth; boredom at this time gives rise to all sorts of troubles, taking the form of lack of interest or rebellion. As has already been shown, interest in all phases of art is naturally augmented, and for those with real gifts in this direction remarkable growth both in appreciation and execution is possible. The power to appreciate and to emotionalize is far ahead of the ability to give expression, yet the adolescent is strongly urged to self-expression; the result is that the rapidly rising tide of ideas which are carried forward on a flood of emotions fairly swamps him, the inner commotion and turmoil obstructing the outward flow; hence he must be protected against overstimulation. ✓To be more specific, although he has so much more to express, the adolescent's growth of vocabulary and his precision in articulation, particularly at the beginning of the period, seem to be halted, hence he vents the intensity of his feeling with a few ready phrases and some vigorous slang, which seem well suited to his needs; "verbalization, like appetites, is now prone to rut-tiness." It is during adolescence, too, that there is a tendency toward superlatives; and admiration for flowery and declamatory prose styles makes its appearance, the liking for rhyme and rhythm coming earlier. All these interests and promp-

things are, in the last analysis, distinctly human, and care should be taken that they are not dehumanized by spiritual indifference or by removing things and ideas from their social setting. Education for the adolescent must be of the heart as well as of the intellect.

CHAPTER VI

SOCIAL CHARACTERISTICS AND THEIR IMPORT

The purpose of this chapter is to describe the most important aspect of adolescence; the changes in the social attitudes and proclivities which occur at this period are the most interesting of all the adolescent characteristics, because they are so human; and they are fraught with the greatest possibilities for individual growth and character formation. As we have seen, the adolescent suddenly becomes sensitive to the aspects of nature, but he is much more sensitive to the influences of his social environment. [He is pretty sure to begin by imitating the social order in which he finds himself; he seems even to imitate the social will of his group. For a time he is pulled and pushed by the social standards, customs, and ideals of those of his age with whom he happens to be placed.] Why should it be otherwise? As we shall see later, his love of approbation is coming to be one of his controlling instincts; morality naturally comes to be identified with that conduct which secures social approval; conduct at this time cannot embody the results of a broad survey of or conformity to a conscientiously thought out system of morals, much as the adolescent is interested in moral issues and theories. His morality in its simplest and purest form accepts the laws which obtain in his group; this establishes for him social harmony, which is just now so necessary to his happiness; and thus it comes to pass that the acts and modes of conduct which reign in his social environment are easily thought of as good and they readily assume the validity of moral laws which must be obeyed if he hopes to be socially secure. Hence this pressure of so-

cial circumstances strongly tends to build up and organize an inner world that will harmonize with the outer world, which is now pressing upon him in so many concrete forms; and thus the elements of character are being compounded. This is why the social life of the adolescent is so important.

In our study of preadolescence we found that the individual appears to be living through a period that rather closely repeats a relatively ancient stage in racial development, thinking most of self and of everything and everybody as effecting self. The preadolescent values these for their immediate use to him; he is ego-centric. Moreover, he is well organized and extremely efficient in all that makes for self-preservation. In the succeeding stage of development the viewpoint and the conduct of the individual seem to parallel a much later and more advanced period in racial development; the higher racial traits tend to become dominant, and "the flood gates of heredity" are now open wide. ~~The youth is still thinking of self,~~ for self-feeling has greatly increased, but he is thinking of self as related to others; things and people come to have a value for their own sake; he is hetero-centric. Although he may be unconscious of it, his mode of thinking and much that he does, as well as his physiological development, are looking toward race preservation. The adolescent's social nature and behavior, as well as his mental and physical natures, are greatly broadened and intensified. Heretofore he was interested in his immediate surroundings, now he would know what is beyond; a strange and veritable wanderlust often takes possession of him. Everything about him suggests an expanding personality, which is trying to realize itself in a new and enlarged environment with which he would be in more vital accord.

The social tendencies and characteristics which appear at this time are so vigorous and so well defined after they get under way, and their nature seems to be so deep-seated and fundamental and at the same time universal, that they have been

classified as social instincts. All who have observed these phases of adolescent development are aware that these instincts do not suddenly take control of the individual; there is often a vacillation between the traits and attitudes of the child and the nascent tendencies of youth. Frequently the conflict seems like a struggle between the individual and himself, appearing sometimes as the obstructed-will type and sometimes as the precipitate and over-impulsive type. In any case it may give rise to considerable contradictory and inconsistent behavior. But, when these social instincts do assert themselves, there can be no doubt about their significance and their effectiveness.

The first to appear and the one which shows stronger in man than in any other animal is gregariousness; it is that urgent prompting which makes it imperative that people of this age get together. Up to this time they have found much that interested them in their home and the activities that center there; and their parents have been delighted to think of them as home bodies. This tendency to be satisfied with a relatively small social horizon is sometimes augmented during the opening years of adolescence, especially in the case of boys, by that feeling of extreme self-consciousness, already referred to, which appears at puberty, due, as we have seen, to the rapid physical and mental changes with their attendant clumsiness and embarrassments; that is, the full maturing of the instinct of gregariousness may be preceded by a brief antisocial period, in which boys seem almost to dislike society, particularly that of girls, fearing they may blunder or in some way act foolish. But very soon the social atmosphere clears; the adolescent seeks society, especially of his own age; and there is shown much interest of a new kind in the opposite sex. All sorts of schemes, such as parties, picnics, and social organizations, are devised to make opportunities for coming together. When not in each other's company, the youthful mind is much occupied with thoughts that pertain to friends and to social experi-

ences, either past or future, real or imaginary. Nearly everything is given a social setting. This craving for the company of others outside of the family and the persistent way in which the adolescent will satisfy it is often extremely disturbing to parents, and it is sometimes unjustly attributed to lack of affection or gratitude. On the contrary, it ought to be interpreted as a sign of a natural and vigorous social development, a yearning which must be met by the proper social response if its great educational possibilities are realized. The influences which come to the individual through these social channels at this time are the most subtle, as well as the most potent, of all life's experiences; for a time they are more powerful for good or for evil than the influences of parents, teachers, and books combined. It is a time when the adolescent feels that he and his group understand more fully and know better all that is essential to life and conduct than older people, who, as it seems to him, have lost step with the times; hence, there is a tendency for a time to be fundamentally impervious to adult influences. Fortunate is the adolescent who is surrounded by boys and girls of his age that are wholesome, enthusiastic, and right-minded; when this is the case, he is quite safe, and his environment is his salvation.

Another and an encouraging social trait which usually becomes well marked at this time is sympathy or fellow-feeling, shown by the disposition and the ability to enter appreciatively into the lives of others. As William James has pointed out, this does not follow from mere gregariousness. Sympathy has often been classed by the writers on ethics as an emotion, but there can be little doubt that much sympathy is instinctive and a primitive endowment; it gives rise to feelings and emotions corresponding in kind, if not in degree, to those experienced by the one for whom sympathy is felt; but it does not necessarily include intellectual approbation. Adolescent sympathy is easily discovered among high-school pupils, especially when

one of their number is in trouble of any kind; whatever the trouble, or whoever the pupil may be, there will be a sympathetic response; flowers will be sent or some way found to give expression to their spontaneous feelings. This is very different from a kind of imitative, momentary sympathy sometimes shown by younger children. The appearance of this characteristic furnishes an instinctive basis on which to build much moral training; without it there could be no real benevolence or real charity: all true philanthropy, which is a relatively modern form of expression, takes its rise from this instinct; in fact, the commonplace virtue of kindness is prompted by it. In general it is found that the most highly developed individuals have shown the strongest adolescent sympathy; in other words, they are the farthest removed from physical and brute nature. Without this distinctively human trait there would be no place for ethics either in theory or in practice; it is necessary as a basis for the best service to one's fellow beings; and it brings a kind of solace which nothing else can give. But this instinct needs guidance during its efflorescent stage; for it may die for lack of exercise, or it may degenerate into sentimentalism, or it may be narrowed into fetishistic forms. To deal properly with this instinct is one of the problems of moral education. There is involved a nice distinction and adjustment in finding the true balance between adaptation to the tastes of others and a sincere and worthy self-expression, between self-abnegation and chronic opposition to others. The deep and fundamental virtue of truthfulness is involved. Like the other instincts, sympathy is not always a safe and adequate guide for action; like love and anger, it is sometimes blind and must be educated and regulated by reason; when properly disciplined and controlled it supplies a natural basis for many of the social and moral virtues.

Perhaps the most characteristic of all the social instincts is the love of approbation, which becomes so conspicuous during

adolescence. As we have seen, there is often a short period in the early teens when the boy or girl appears calloused and indifferent to the opinions of others; but, as already intimated, this is largely protective conduct (possibly instinctive) due to a desire to conceal the real state of mind, and not to be interpreted as in any way indicating disregard for what others think; it is because the youth is concerned about the opinion of others that this attitude of apparent indifference is assumed. However, this period soon passes and is replaced by a strong and evident desire to please others, particularly the opposite sex. As Hall expresses it, "there is a new sense of passing some kind of unwritten examination in the world's school and a new rivalry to stand high and not low upon the multiplying and lengthening scales." To win good-will becomes with a majority of adolescents the most powerful motive, sometimes a sort of "ruling passion." We see it in its most emphatic and instinctive form in courtship. Another all-compelling form of the same instinct is the desire for renown, fame, glory. It is a truism to say that these are incentives which stimulate human beings to the greatest efforts of mind and body of which they are capable, although "the paths of glory lead but to the grave." It is because of the universal nature of this instinct that public sentiment or the will of the people, when it finds adequate means of expression, has such telling influence. The adolescent's strong desire to please is manifested in more ways than any study has yet been able to enumerate: the attention given to the smallest details that affect personal appearance, including the toilet, ribbons, rings, pins, perfumes, flowers, new colors, latest fads and fashions; the much thought given to manners, such as assumed vivacity, tricks of speech, pronunciation, diction, penmanship, affected ease in bearing, overprecision, poses of all kinds such as appear in the fashion books, affected smiles, imperturbability, abandon,—ringing the changes on these and many other ways of trying to attract attention and

to please. All who deal with high-school pupils know how quickly any bit of slang, catchy manner, or peculiar style of dressing permeates the student body. Boys hope to win approbation by some sort of feat or stunt which displays skill, strength, fleetness, and especially courage; the presence of the girls stimulates and refines. The supreme effort that is often made at this time to control a troublesome temper is an interesting example of how one instinct may inhibit and supersede another and indicates the power of the instinctive tendency under consideration. The state of mind which takes its rise at adolescence often becomes fixed and carries over into the years of maturity. There are many men and women who seem to retain their instinctive adolescent fervor when in the company of the opposite sex; their whole manner is suddenly transformed. The poet Burns is a classical example of this sensitiveness and quick response to the influence of sex. There is no doubt but that the strong desire for approbation natural at this time can be made a most powerful lever in the hands of an adult whose function it is to deal with adolescent boys and girls; they tend to become what those whom they respect think they are. This principle finds many illustrations in the reminiscences of high-school life collected by Irving King and published in his book on "The High-School Age." All successful workers with adolescents in any capacity are constantly proving its efficiency as a natural and wholesome stimulant to better effort and conduct. This instinct can be made to bloom naturally into courtesy and affability, and these, when they become habitual, tend to react on the deeper nature of the individual and make him what he seems.

We found the preadolescent delightfully and effectively selfish; he is our true barbarian. He is clothed, fed, sheltered, taught, and he takes "no thought of the morrow;" all currents set his way. His parents live for him, and he expects it without giving the matter a moment's thought; in fact he expects

even his whims to be heeded. But with the advent of puberty, or soon after, the currents should set the other way. Now is born in the soul, if ever, that highest of all the instinctive and social virtues; life must now become altro-centric if the highest stage in the process of socialization of the individual is to be reached. The spirit of altruism is an infallible index to the progress of either the individual or the race; it is the central virtue of Christianity, embodied in the golden rule, difficult to attain in its perfection, perhaps reached only once, but worthy of all effort, and due for cultivation during all the years of adolescence. The advent and manner of growth of this instinct and its corresponding emotions are perplexing and often discouraging; it may be said to come in streaks, and it often alternates with the grossest forms of selfishness; the old and the new laws of being seem to struggle for the mastery, and we must not expect the adolescent to do things by halves. The billowy currents of his on-rushing nature throw him sometimes backward on the archaic rocks of selfishness and sometimes on the banks where bloom the flowers of chivalry; self-subordination and much thought for the welfare of others alternate with outcroppings of greed and pure selfishness. Altruism is a plant of slow and uncertain growth and almost never completely matures; as Hall says, "we see in adults noble lives and acts veined with petty meannesses, which are the residual and unreduced organs of childhood." Because of the appearance during adolescence of this instinct, it is an age of unselfish vows and pledges of devotion to causes calling for much self-sacrifice and painful servitude; it is an age of reforms (all have at times been reformers) and an age when social service is included in one's life-plans; noble visions and deep sympathies are in the ascendant. Because of the strong impulses which are now surging, because of the lack of intellectual perspective, and because of the glorious optimism of youth, we must expect considerable ill-directed enthusiasm; and far be it from any adult,

acting in the light of his wider experience, to daunt this enthusiasm, for it is the best contribution which youth makes to a world grown stale with experience.

It is by reason of these maturing social instincts, with their resultant emotions, that the deeper and more subtle elements of personality are coming into existence and being blended, and a rich and well-rounded life is being shaped; character at this time, if ever, takes on beauty and solidity; and the whole strange alchemy which results in real manhood and real womanhood is working too rapidly and too subtly to be understood.

If the foregoing account of the social instincts is correct, it follows that adolescence is the time when the individual should take possession of his social heritage, "when," as Slaughter suggests, "adaptation is made to the whole group of non-material resources of the race, intellectual, moral, artistic, and religious." Failure to accept this social inheritance and consequently to make the proper adjustment to one's surroundings means social inefficiency, which is the cause of untold failure, misery, and despair. There is nothing more pathetic in all human experience than the state of mind that results from repeated failure due to lack of social efficiency. The one thus failing has the best of intentions and puts forth his utmost effort, yet is fated, as it seems to him, to dismal failure; and he never suspects the cause, for the cause is negative and lies in a forgotten part of his life's history; he is enacting a continuous tragedy, for his aspirations cannot carry him over his inexorable social limitations.

Hence, the cardinal problem of adolescence is how best to foster and direct the many social instincts and impulses; in other words, how to make the strongest social appeal in the interest of strong character and right living. All efforts to help — physically, mentally, and morally — must be given a social setting. At this age the individual is sustained and nourished by the social medium in which he is placed; and, because

of the vital unity of human nature, if this medium is rich and wholesome, all will go well. This means that the much-to-be-desired social training, which in the last analysis includes moral training, can only be given by means of concrete situations, and these are sure to arise. As has been shown, the adolescent will plan many ways to bring them about; and it is the work of adults to see that youth is surrounded by adequate protection from the natural dangers and that the wayfarer has proper guidance. It is only by contact with concrete social situations that the adolescent can learn to evaluate the various elements which make up any situation. It often resolves itself into a matter of social conformity. Dr. Royce assures us that, "Social conformity gives us social power. Such power brings to us a consciousness of who and what we are. Now, for the first time, we begin to have a will of our own. And hereupon we may discover this will to be in sharp conflict with the will of society. This is what normally happens to most of us, for a time at least, in youth." This conformity to the social will is about the only morality that many people ever know; and, if it is not allowed to become self-effacing in its effects, it makes for social efficiency, and social efficiency is synonymous with success.

The discussion of this important subject will be continued in a more concrete form in Chapter XI, which deals with the high-school problem of "Social Activities."

CHAPTER VII

MORAL ASPECTS

In a previous chapter it was stated that, during the unique period of preadolescence, the child, in the deepest sense of the terms, is neither moral nor immoral, that he is rather unmoral. His conduct may be very satisfactory and pleasing, or it may be very annoying and often is so to those who are not interested in him. Whatever he is, it is largely the result of imitation or of what has been imposed upon him by adults. He gives little thought to his conduct as such. But not so with the adolescent; the period of habitual morality has closed; whatever his actions may be, we can be certain that the adolescent is thinking about conduct; he is becoming a moral being, as the old theology expresses it, a free moral agent. Is it strange that he turns part of his newly acquired ability for independent thinking toward moral and later toward ethical problems? These matters of conduct, like the rest of his problems, he must settle for himself. Then, too, the unwonted violence of life's stream is driving him toward and into courses of conduct that are as marvelous and puzzling to him as are the physiological manifestations from which the moral awakening takes its rise. Thus adolescence, when viewed in its moral aspects, presents innumerable and vital problems. The problems are vital because the final test of human endeavor is conduct, the determinant of the status of both the individual and the race. Again we find adolescence a critical period.

We have already found that there is a time following closely the on-coming of puberty when the center of personality is physical rather than mental, when the individual often seems

swamped by the unfamiliar, on-rushing flood of physical impulses that are beating down all the old landmarks, and as yet nothing has come to take their place. It is a time when, as we have seen, the hereditary forces are asserting themselves; they are strong, and they are so new and strange to the individual that they are not easily governed. During these years the adolescent, at any rate the boy, takes delight in brushing aside many of the old restrictions and breaking away from the line of conduct which he has followed so long that it has become habitual. As he often thinks seriously about himself and his conduct, he wonders about this new wildness and he finds it just as puzzling as do his parents and teachers; and he may speculate as to how it will all end. Some time during this trying period the boy or girl is likely to assume an attitude of cocksureness toward things in general; there is a noticeable lack of docility, which brings its train of difficulties; the myth that elders are to be trusted as guides and advisers because of their wisdom born of experience is exploded; and the adolescent prefers to work out his own philosophy of life.

The difficulties for those who are responsible for youth at this disturbing time are greatly increased by reason of the wide range of individual differences manifested in moral development; each case is likely to be somewhat unique, at least it so appears to the adolescent himself; and, if he thinks that his interests and aims are not understood and appreciated, which often happens, he may become for a time morose and retire within himself, being possessed of a kind of self-pity. The difficulty is perhaps more likely to take this form with girls than with boys. Occasionally the process of getting out of this antisocial mood, when the promptings to break away from the established order of things are strong, is a long and painful one; for the emotions are surging so violently that any attempt toward a re-formation of character and conduct along the lines suggested by the new thought processes may be thwarted.

It is a peculiar psychological condition due to physiological causes, a case where the chief physician in working a real cure is the adolescent himself, who is temporarily disordered and sees "as through a glass darkly."

As might be expected, it is during this yeasty stage of development that pupils from choice leave school in the largest numbers. As matters are now generally arranged, there is a break in the educational ladder, which most unfortunately coincides with the period of greatest unrest. The ordinary restraints of the classroom and authority constantly imposed from without become irksome past endurance; and at the same time the larger freedom and greater activity of the world outside of school are calling the pupil and promising more scope for the new forces that are welling up within. This is the time of truancy and running away and all the other troubles that a restless, unformed, and undisciplined nature naturally gives rise to. The boy in school at this time often feels like some wild animal in a cage and his chafing is like in kind; the blood of his feudal ancestors is surging in his veins, and he may yield to a yearning to be up and away, leaving the stupid routine of the schoolroom behind him.

"A boy's will is the wind's will,

And the thoughts of youth are long, long thoughts."

All who have passed through a vigorous, typical adolescence under the conditions of modern civilization have at times experienced this vague, impulsive longing to break away from all outward restraint and once for all assert self to the limit; and all such should be able to enter sympathetically into the feelings of the restless creature now held in captivity.

This condition growing out of a restless surplus of energy and an unstable mental equilibrium is not so far removed from the time when the first criminal out-croppings appear as it might seem at first thought. The new emotions and impulses have a driving force that cannot always be withstood; and,

if the environment is antisocial (for instance a hooligan gang), the youthful wayfarer is likely to be either driven or pulled into many a devious path. It is not strange, however disconcerting it may be, that the criminal ranks are largely recruited from early and middle adolescence. The most alarming consideration is that statistics show that the proportion of youthful offenders to the entire population is rapidly increasing, and this notwithstanding the great faith of the last generation in the uplifting and civilizing influence of the new education provided for all the children of all the people. This depressing fact is not made less depressing when the best students of modern eugenics assure us that the explanation is simply that the birthrate among the morally unfit is much greater than among the morally sound, and that delinquents of nearly all kinds, including the feeble-minded, the high-grade morons, the degenerates, the epileptics, and the vicious, breed true and follow the Mendelian law. However, for the purpose of this study we reject the born criminals, who are defined by Dr. D. M. Guyer as "those offenders who are congenitally unable to distinguish between what is generally accepted as right and wrong, or who if recognizing this are nevertheless uncontrollably impelled toward or unable to refrain from antisocial acts because of some inherent condition of intellectual or volitional make-up." Care must be exercised, however, in both our thinking and our practice, not to classify as born criminals those offenders whose troublesome outbreaks are merely reverberations of the savage life of their distant progenitors; these ancestral tendencies and primitive impulses to a wildness and an almost resistless fury readily suggest criminal instincts, and, if the proper influences and control are lacking, youthful crimes and perhaps criminals will be the result. Nearly all vigorous, normal boys are liable at certain stages in their development to manifest some of these primitive traits.

Anything approaching a complete study of the moral as-

pects of adolescence must include an account of the kinds of crime most common at this period, their causes, and the possible preventions and remedies. For our purpose, a criminal may be understood to be any person whose conduct is so antisocial as habitually to include acts that the community as a whole has decided by custom and usually by law not to tolerate from any of its members, conduct that, if persisted in by a large number, would be fatal to the integrity of the community as making impossible any life or action in common; thus the line of demarcation between conduct that is criminal and conduct that is judged non-criminal is largely fixed by convention and varies greatly according to time and place.

It must be kept in mind that very seldom does any youth pass suddenly from the comparatively harmless pranks of childhood to acts that his community classes as seriously criminal; the antisocial acts of adolescents usually form a closely graded series, which in the case of any individual tend toward being progressive; hence the classification of these adolescent offences and felonies cannot be anything like complete. In general it has been found that the maximal age for malicious mischief is fourteen, that crimes against property lead all other forms of crime (reaching a maximum at sixteen), the proportion according to Drähms being fifteen to one; while statistics show that crimes against persons reach a maximum between twenty and twenty-five. The worst time in the life of a youth is likely to be the year after leaving school, especially if he leaves early; this fact must have a significance demanding the most serious study.

Perhaps the misdemeanors, least offensive because of their origin, and least dangerous to the individual when treated as their nature demands, are those that may be classed as larks and adventures. These usually originate with extremely active young people who have a great fund of initiative. These misdemeanors are generally the result of an intense desire for

the excitement that they furnish and the scope they give for the dare-devil propensities so common in the most promising adolescents. Often the aim seems to be to get just beyond the law, there being a great attraction toward any conduct that breaks through the established order and much excitement in doing what is forbidden. Perhaps most frequently the satisfaction comes from anticipating how surprised, how shocked, or how angry some one will be. In dealing with this form of offense, for like other adolescent irregularities it must be checked, the adult must divest himself of all feeling of annoyance if he would see the situation in its true light and if he would retain the sympathy and confidence of exuberant youth; all successful dealing with people demands that they be treated as they really are.

Truancy, which has already been referred to and explained, is not of necessity extremely harmful in itself; but it is likely to lead to very troublesome and dangerous complications, from the fact that the truant must find some sort of occupation and companions, and these will naturally not be of the best; it may, also, easily be the beginning of vagabondage and vagrancy. The studies by L. W. Kline and others indicate that this offense increases rapidly at and following puberty, the point in the life of the individual corresponding to the time when primitive people naturally become of age, whereas vagrancy reaches its maximum a little later. The causes appear to be very numerous: the migratory instincts and consequent habits of distant and primitive ancestors are believed to figure as remote causes, truancy being a temporary reversion to their habitual mode of life; doubtless most of the inherent causes are the adolescent characteristics with which we are already familiar, such as, a new love of freedom and independence, reaction against authority of any kind, a new feeling for nature resulting in a strong desire to be out-of-doors, the strange attraction of lake and stream, a yearning for different surroundings resulting in

impatience with familiar things and habitual duties and the monotony of routine, a moody love of solitude, the vague charm of some-where-else, the calls of a developing motor-sense that make travel of any kind peculiarly seductive, and the mere spirit of adventure so common at this period; sometimes the exciting cause seems to be a book of adventure occasionally found in possession of the runaway. Some combination of these causes work in a mysterious and subtle way to tempt many adolescents from the narrow path of duty; and hundreds of testimonies prove that very many are tempted who do not yield. The causes do not appear to indicate that truancy and running away are evidences of any natural depravity, but they seem rather to make it clear that these offenses should be anticipated and forestalled by removing some of the causes and by providing other ways for the migratory instincts to function. Nearly all writers place much of the blame for this form of delinquency upon the present educational system, which without doubt was devised primarily for the purpose of training the intellect, little heed being given to the other elements of youthful natures. At any rate, the schools often manage thoroughly to bore instead of interest the adolescent when interest in general is at its highest. It would seem to be the problem of the teacher to fuse the necessary school activities with such traits and tendencies as boys and girls manifest when they give expression to their real nature; if this can be done, we have a natural and effective means of energizing the work. The trips on foot and by rail and automobile taken in connection with courses in science and history are examples of how many schools in Europe, as well as several in this country, have made the natural inclinations of this period contribute to the purposes of the school.

The studies of adolescent conduct show an exceedingly large amount of incorrigibility. Perhaps this might be expected, because there are physiological, psychological, and, according

to Hall, anthropological causes, with which we are already familiar, for this troublesome form of irregularity. Many of the causes are the same as for truancy. As we have seen, the rapid maturing of sex gives rise to much unrest and general physical disturbance; it is the time for the beginning of independent thinking, and there is normally much emotional turmoil and many impulsive promptings, all tending somewhat to establish a recalcitrant attitude toward authority and restraint; and perhaps the echoes of those times when far-removed adolescent ancestors broke away from parental control and set out for an independent existence are reverberating in the youthful incorrigibles. Incorrigibility reaches its maximum at the age of fourteen, and it is very prevalent from twelve to seventeen inclusive. Whatever may be the explanation, the home must take a large share of blame for this dangerous form of youthful delinquency; incorrigibility nearly always begins in a lack of parental control and spreads to wider fields later. It would seem to be the natural duty of parents to understand adolescent nature as exhibited in their own children; but very often this is not the case, and there is a sad lack of attention to matters of control, growing out of a want of definiteness and firmness of purpose. Lack of sympathetic understanding results in unreasonable demands, which are always likely to be ignored, and lack of firmness and consistency invites disobedience. There is a much smaller percentage of disobedience in the schools than in the homes, notwithstanding the much greater numbers to be controlled and the higher standards of conduct and accomplishment that are maintained. This form of misdemeanor is alarming, because it leads the list of youthful offenses, being nearly double any of the others, and because it is likely to carry in its wake all the other misdemeanors and crimes of which adolescents are guilty. So far as the schools are concerned, there must be teachers who know adolescent

nature, who are sympathetic, and who are definite, consistent, and firm in their requirements.

Like nearly every other human trait, the power of anger is increased and much deepened at adolescence. Nearly all normal boys develop an added propensity to fight at the beginning of the period, and many girls show more petulance and irritability at puberty. Although this tendency does not lead to so many offenses as many of the others, it is something that must be got under control; that is, the proper inhibitions must be set up: nearly all action prompted by rage is unreasonable, harmful, and sometimes dangerous. In general there appear to be two common types of anger: one which tends to explode and work itself out on somebody or something, and another which tends toward moroseness and sulking, the moody, unforgiving kind. Either type will be made worse by humoring; both need drastic but careful treatment. The treatment naturally varies greatly, because the kinds of this disorder and the individuals vary greatly. The present writer has much sympathy with the following view expressed by J. W. Slaughter: "As regards its treatment, it may be observed that nothing is more useful than the Aristotelian catharsis as found in the usual boy's fights. The modern world is perhaps somewhat over-civilized in its endeavor to prevent the healthy locking of horns of young males — the few bruises received are a small price to pay for the moral benefits involved — and the boys themselves nearly always ensure fairness and prevent resort to violent methods." Moreover, fighting among boys, which so horrifies a certain type of adult, can be shown to have other important psychical values: it tends to supply courage to the timid; it forces concentration and stimulates the most intense action; it calls for a long series of quick judgments; and it calls for a high degree of self-control under trying circumstances. If these benefits really accrue from this strenuous form of youthful contest, there can be little doubt about

the powers and values gained carrying over into the more tranquil moods when the efforts are directed toward that which is immediately useful; it is a well-known biological law, that any tissue adapts itself to the tension to which it is put; the violent beating and twisting by the wind are needed to give the greatest strength of fiber to the unprotected oak. But fights are not always forthcoming, and no one would advocate their instigation; however, boxing and other forms of personal contact, when carefully managed, can be profitably used as a substitute. In our zeal to deal judiciously with adolescent anger, we must remember that complete control rather than eradication should be the end sought. Dr. Hall maintains that to be angry aright is a great part of a moral education. "Anger should be a great and diffused power in life, making it strenuous, giving zest and power to the struggle for survival and mounting to righteous indignation. Its culture requires proper selection of objects and great transformation, but never extermination. The healthy and complete male especially will never be an entirely peaceful creature, and cowardice and the loss of courage will always mean some degree of psychic emasculation." In general it may be said that in dealing with the adolescent tendency to uncontrolled anger plain talk on the part of a responsible adult whose actions do not belie his words is always wholesome, except in a few types where ignoring is the best treatment; the tempestuous youth must be made to understand in the most emphatic way possible the unreasonableness and the consequences of uncontrolled wrath. The one who would aid adolescents in securing control of temper has a powerful ally, if use is made of it, in the strong desire that arises at this time to secure and maintain a good social status; it is neither manly nor womanly to yield to uncontrolled anger, and this they must be made to see.

Adolescent cruelty and all the tendencies that lie in this direction are difficult to explain either biologically or psycho-

logically. There is a form of cruelty frequently manifested in childhood due perhaps to curiosity or to thoughtlessness, which should pass and usually does when adolescence comes. But the cruelty which continues into or begins during adolescence is a more serious matter and is in a sense unnatural. Nearly all cruel tendencies should disappear at this time, for, as has been shown, sympathy becomes instinctive and frequently very marked, especially for any living thing in trouble. Extreme cases of cruelty are probably due to hereditary defects of some kind and are not infrequently found in individuals that show some abnormal sexual tendencies; they seem not to be due to a mere lack of sympathy; and strange to say, a youthful torturer sometimes shows exquisite sensitiveness and tenderheartedness for something, perhaps his pet, seeming to indicate that he has "specialized psychic zones." This untimely adolescent barbarity may in some way have its origin in the ages when primitive man was at enmity with nearly all mankind; the kindly and fraternal sentiments have been of slow growth in the race. Whether the explanation is atavistic or something simpler yet to be discovered, this is a disappointing and discouraging phase of human nature which crops out at this time, for no curative measures are known. When the normal instinct of human sympathy is wanting, there seems to be nothing upon which to build. The cruelly disposed must be restrained through fear of consequences.

For some unknown reason a railway and things connected with it have a strange interest and fascination for boys, especially those living in the country. To them the men who operate the trains and care for the roadbed seem a little different from other people; they seem a little mysterious, a little to be feared, and withal they are people on whom the playing of tricks furnishes mild adventures. These pranks take the form of flagging the trains, greasing the rails, placing explosives or obstructions on the rails, throwing stones at the cars or through

the windows, stealing old metal, breaking the insulating glass on the telegraph poles, and any other form of annoyance that has in it the desired amount of risk. This peculiar kind of perversity commonly continues to the age of fifteen or sixteen, when it appears childish and foolish. The motive behind these apparently meaningless outrages is some form of excitement: the boys wish to see if they will be detected; they imagine the anger of some one when the trouble is discovered; or they find this a way of displaying a kind of courage to the members of their group, for these are seldom solitary misdemeanors. These depredations connected with railroads are rather difficult to deal with because the identity of the guilty ones is easily concealed; it is fortunate that they do not carry over into later life.

Another form of offense of which nearly all real boys that have had the opportunity are guilty is that of robbing orchards, stealing melons, and the like; the motives are probably about the same as those for the misdemeanors just discussed. Of course the boys eat the things taken and enjoy them very much, because they are "stolen fruit;" but this is not the motive, for they often have all they want of the same thing at home. Again the prime motive is excitement; and sometimes their feeling toward the owner has its influence, as they will rob with greatest pleasure the one of whom they have an unfavorable opinion. Like many other troublesome adolescent tendencies, it is an expression of superabundant physical and mental energy and should not be classed with ordinary stealing; for many indulge in such pranks that could not be induced to take anything else; things to eat, according to adolescent standards, appear to be in a class by themselves. On the whole it would seem that this is a characteristic of the period not to be taken very seriously; in spite of anything that can be done or said, the young offenders persist in thinking of the matter lightly, and many adults with the best of reputations and holding high positions do not regret their part in such youthful escapades.

Another form of stealing, which the studies thus far made report as rather common, is the practice on the part of the adolescent of taking money and other things from members of his own family; and it is found that this seldom leads to stealing from people outside the family, the idea being that the thing stolen in some sort of a way belongs to him or would be given to him if he were urgent enough in asking for it. At any rate, there is always in the mind of the offender some kind of a reason or excuse. To the writer it seems that in nearly all such cases there is something radically wrong with the family arrangements or with the relations of the members to each other, for this kind of misdemeanor does not appear to be explainable by any of the common adolescent traits and tendencies. It is a serious form of combined selfishness and dishonesty which usually need not be allowed to develop; it may well be treated as a form of disloyalty to the family brought about by a lack of common family interest and real unity.

Petty larceny as defined by law reaches its maximum at fifteen, although the cases are almost as numerous at fourteen and sixteen, these years including more cases than all the other years combined from seven to twenty-one; this is according to Hall's table based on the census of 1890. Boys lead girls in this form of crime about four to one. This kind of misdemeanor is often serious and one that should be attacked in every way that has been found effective. It may be thought of as an extreme form of selfishness at a supposedly unselfish age. The motives which prompt stealing are very numerous, differing largely with the nature of the young thief and his environment. It is generally found that those guilty of stealing, as in the case of family pilfering, have in mind some sort of an excuse or justification, however ridiculous it may be. Hall thinks that there must be a deep-seated, vague instinct which gives rise to the feeling that things really belong to those that need them most or can best use them, for the finer conceptions of personal

property came very late in the development of civilization. Stealing during childhood is usually to satisfy immediate wants; among the things stolen, edibles or money to buy them, always lead. Thefts by fraud and stealth come later; and, as the age advances, the young offender develops larger plans to take the place of his disconnected thieveries. The literature on this subject is full of the accounts of predatory clubs and gangs; the most cowardly boy becomes bold when he "hunts with his pack." Perhaps the most readable description of these thieving organizations and their manner of operating in a large city is found in Jacob Riis's "How the Other Half Lives." Associated with this organized stealing are nearly all the offenses known to criminal law, sometimes including murder. It is not certain that the best way of dealing with this form of adolescent misdemeanor has yet been proposed. All the most careful studies seem to point to the futility and ineffectiveness of extreme penalties, at least as applied to stealing when the spirit of the gang is behind it, for the one who is "pinched" and punished at once becomes a hero, and for an adolescent to be a hero is the strongest possible motive. The most effective way thus far found to deal with organized crime among boys is to turn the energies of the gang into some other form of activity; this is often easily done by those who understand boy nature, as witness the effective work with the boys of New York City by Arthur Woods when Police Commissioner. Commissioner Woods, in pursuance of his work of prevention, sought to supply the boys with "enough recreation, instruction, and employment to occupy, if possible, all their spare time." And above all, according to the report given of his work by "The Outlook," he tried to develop in them a feeling of responsibility, and this he did by organizing the Junior Police; he found that the leader of the toughest gang was always the best "scout." In general athletics of a strenuous order appear to supply the surest remedy. As to individual thieving, each case is a sep-

arate problem and the remedies are naturally as varied as the elements which are found combined in the problem, the first consideration being the real nature of the individual offender; then there are the social, economic, and educational influences that must be reckoned with. The one object in mind should be reform and prevention and never punishment, unless as a means. It is pretty certain that much adolescent crime is transient when the social and moral surroundings do not contribute to the evil tendencies of this age. The studies seem to show that about twenty-five per cent of people in the most respected vocations have some time during their lives been guilty of theft; this consideration ought surely to plead for a sympathetic treatment of the adolescent with criminal tendencies.

Lying on the part of adolescents is extremely difficult to deal with. The difficulty seems to come from many causes, one of the chief being that it is not generally considered a serious offense; it is troublesome to treat any fault that is not held approbrious by society. Then, too, the forms of deception are so many and so subtle: in small matters, which make up the most of life, false coloring easily slips in and distorts the picture; considerations of policy and prudence lead to concealments; falsehood in the guise of praise pleases; kindness and courtesy suggest many modifications; sometimes an untruth does not seem a lie when softly spoken; and an amiable lie does not often give serious offense. Thus the adolescent's instinctive desire to please naturally leads to insincere utterances; lying, as Ruskin affirms, soon becomes "less a matter of the will than of habit."

The causes and motives are extremely varied, giving rise to many different kinds of lies. The first kind appears in early childhood, is common to nearly all intellectually lively children, and is due to a confusion of fancy with reality. This kind is not in the least dangerous; it is merely the sign of a

ively imagination, which the child sees fit to exercise along with his other budding faculties. Like the other faults and virtues of early childhood, it has no ethical basis, and there is no reason why it should carry over into the later periods of life. In early adolescence there frequently appears the boasting lie, the motive clearly being self-exaltation; and it belongs with the showing-off tendencies of the period already noted. In some cases it may be due, as has been suggested, to "a stinging sense of inferiority" that the youthful braggart hopes to cover up. This form of lying when persisted in is usually recognized on the part of the group by a well-chosen cognomen, which has for its function the puncturing of the self-inflation of the young aspirant for approval. It is a kind of lying which the group can manage better than any adult, for it often yields to ridicule. Closely akin to this but of a more general nature is the dramatic lie, which is likely to appear at about the same age. The motive here is to produce some kind of striking effect and draw more attention to the transgressor than would result from plain truth-speaking. Girls are generally supposed to be more inclined to this type of falsehood than boys. There is usually no intention to deceive; thus, it is a bad social habit to be broken up rather than an indication of an unfavorable moral bias, and it usually passes with the passing of the adolescent desire for excitement and sensation. \ Another kind of lying, more difficult to deal with and natural under conditions often prevailing in childhood and youth, is that used to escape punishment. It is claimed by some writers that this type of lying also is void of any real moral qualities, that the conduct of children is naturally established on a practical basis, those lines of conduct being chosen which in their experience are found to lead to the desired result; hence, if young people lie to avoid punishment, it is not their fault, but it is merely evidence that matters have been so managed for them that they have learned that in the long run it pays to lie. If this view is

correct, and there can be little doubt that such is frequently the case, the remedy is clear although perhaps not easy of application: always manage in such a way as to put a bounty on truth-speaking and never the reverse. In practice this means that many faults must go unpunished and many retaliatory feelings of adults remain ungratified. When this type of lying persists in adolescence, and it is generally common, it can often be made to appear as a form of cowardice, which fundamentally it is, and few adolescents, especially boys, wish to be considered "yellow;" lying is not playing the game fair and is not good sportsmanship. Unless the moral tone is very low, the boy or girl is always admired who tells the whole truth when the circumstances are such as to call for courage in so doing. If the custom of telling the truth about one's own conduct can once be established, the individual offender will find it difficult to resist such a code of honor; public sentiment at this age is very powerful and social pressure is quickly felt. This type of lying is more likely to exist where little persistent effort is made to get the truth, or where punishments are extremely severe; it is not wholesome for the adolescent to get the notion that it is easy and safe to deceive; and, contrary to what one might expect, punishment for lying is not effective, as lying comes to be a matter of taking chances, a species of gambling. The last kind of lying to be mentioned here is that contemptible type known as the hypocritical lie; this form is used as a cloak for all sorts of personal shortcomings, and follows many unfortunate individuals through life. They are trying to measure up to the standards of various kinds which their community has set but are not quite succeeding, and they hope to maintain the good opinion of their friends and others by insidious misrepresentations. When hypocritical lying has become habitual, it tends to render the liar immune to the judgments and influences of his community; for he continually simulates by word and act a course of conduct which

on the surface conforms to the moral standards around him, and he thus shuts himself off from the normal and ever-present molding influence of public opinion. The importance of rooting out this kind of lying before the close of adolescence is evident. The most natural remedy seems to be the persistent, relentless, and continuous exposure of the fabrications, so that the despicable and worthless nature of these efforts at deception are always forcibly impressed. This often implies much courage and skill on the part of those responsible, for the treatment demanded is heroic and the ramifications of the false fabric are frequently intricate and difficult to unravel.

It is difficult to understand why lying is so generally looked upon as venial, since its whole logical consequence is the disruption of society, and since it surpasses all other adolescent faults as a contributor to criminal tendencies. It requires but little imagination and thought to see what would happen to society if everybody lied all the time; and it does not require deep insight as to the workings of the human mind to understand how much the habitually successful deceiver is tempted to stray into all sorts of devious paths; the whole drift of his life is toward a cynical disregard for social responsibility. On the other hand, the one who habitually and courageously speaks the truth is socially benevolent; he kindly serves his fellow-man with the truth, which in the long run is always helpful.

It will be remembered that the discussion of the nature and treatment of all forms of degeneracy falls outside the scope of this book. The aim in the preceding account of discouraging and troublesome adolescent faults and tendencies has been to acquaint the reader with their nature and especially to forestall any feeling of surprise or horror that might arise through a lack of sympathetic understanding. The adult must not lose faith in erring youth. Faith, calmness, and sympathy are the three elements much needed in the normal atmosphere that surrounds adolescence. When faith, calm-

ness, and sympathy are exercised by a strong and pleasing personality, the youth of normal type is comparatively safe, at least so far as the final outcome is concerned.

Sometimes it would seem that nature has made the moral path of the adolescent difficult; but that is not all, other influences combine against him. The work of those who would generously aid adolescents in right living and in the building of fine and strong characters is greatly hindered, and the efforts of youth to follow the path of rectitude are continually thwarted by the many forms of modern commercialism which have been contrived to prey upon the sex susceptibility of youthful nature. Adolescent instincts and impulses are exploited, not because of any sinister intention toward youth, but from purely commercial and selfish motives. Hundreds of traps are devised and baited with subtle forms of suggestion which appeal to the developing sex nature: the latest catchy songs and music are insinuatingly suggestive; some of the modern social dances are devised to promote other things than graceful movements; much of modern fiction goes as far as it dares in suggestiveness and the portrayal of questionable situations, this being the surest way to increase the sales; the flaming bill-boards used to advertize the theater, vaudeville, and moving-pictures are designed with an understanding of the psychology of adolescence; and every vaudeville bill, and many moving-pictures and plays have in them enough that appeals to the sex impulses to make sure of the adolescent portion of their patronage. The adolescent boy is very anxious to know all and do all befitting man's estate, hence he rushes into many dangerous experiences, and the one who provides the means profits by it. Because of ignorance of their own developing functions, thousands of youths go every year to quacks, who have managed through misleading advertisements to alarm them; this happens because parents, teachers, and friends have been too negligent or too cowardly to deal with the problem and furnish the needed

and legitimate information; hence the selfish exploitation of perfectly normal development goes on. Surely adolescence is greatly sinned against.

But fortunately there are other and more encouraging tendencies and characteristics to describe; not only is adolescence a time of moral turmoil and danger, sensitive to criminal leadings and easily exploited, but it is also the period rich in ideals, visions, and high aspirations.

"The Youth, who daily farther from the east
Must travel, still is Nature's Priest,
And by the vision splendid
Is on his way attended."

In early adolescence the ideals, to be sure, are often crude, changeable, and vague; frequently they are ridiculous and impossible of realization; the boy may want to be a "pugilist and all-round sport," the girl may wish to be an actress; and at this time their ideals change rapidly. But there is an idealism, and this idealism is very helpful in carrying the youth past untoward influences and aids greatly in shaping his life. When middle and late adolescence are reached, the ideals tend toward more permanence, and, if the social and educational influences are fortunate, we may expect higher aspirations and a fine spirit of altruism. The youth often believes that he is to play a great and important part in the drama of life; he is impatient with existing conditions and he feels that he was "born to set them right;" the older people around him are dreaming, but he is young and he "sees visions;" and withal a splendid moral enthusiasm carries him forward, and, if he has real ability and wholesome surroundings, a pleasing and strong character is taking shape.

What is the origin, meaning, and function of these ideals, which are so significant at this time? Literally the term suggests something existing in the mind only; it is a mental conception of what is most desirable; for the time being it is thought

of as an ultimate aim. But, although in general ideals do not stand for objective realities, they must not be conceived as chimeras or mere fancies and sentiments. Any such notion, besides being false, would unfit one to deal successfully with youth. As will be shown later, youthful ideals are determined largely by the concrete surroundings and experiences of the individual; from this aspect they have an objective and substantial basis. An ideal, like an image, uninfluenced by experience and environment is utterly impossible; thus, although an ideal is something intellectually conceived and entirely novel so far as the one entertaining it is concerned, it is built up from knowledge and contact with the real world. Hence realities dictate ideals; and experience, education, or anything that enlarges one's horizon and perspective modifies one's old ideals and brings new ones into existence. The double origin of ideals, that is, the individual and the social, is rich in suggestiveness for those who study adolescence from practical motives: since ideals are related to one's nature and faculties, we are reminded that no two adolescents are alike in their outlook and aspirations; and, because ideals are continually being multiplied and modified by knowledge and experience, we see emphasized again the importance of environment in its relation to moral growth and character formation.

At certain times youth may be said fairly to revel in a world of ideals; instead of saying that the youth gets ideals, one might better say ideals get the youth. This is especially true, as R. S. Bourne has pointed out, when "the flood of life is checked in the direction of pleasure," which is likely to be selfish, and "it bursts forth in the direction of ideals." It is in this world of ideals that the past and future meet; the ideals are built up from all the past accumulated knowledge and experience, and they beckon youth on to a more glorious future; although they have their origin in the past, they function as a pull from before, rather than a push from behind. This is the thought that

many poets have given us: it is "the heavenly message" of the chambered nautilus which Holmes found by the unresting sea; it is the teaching of Tennyson's Merlin who follows the Gleam. It is in this zone of ideals that the formative processes are taking place. It is that zone in individual development that is fraught with uncertainty and dramatic interest; other parts of life are relatively mechanical. Bourne believes that we get few new ideals after we are twenty; "a man's spiritual fabric is woven by that time, and his experience, if he keeps true to himself, consists simply in broadening and enriching it."

Although ideals uplift and brighten the life of the adolescent, they naturally give rise to a sense of incompleteness and frequently discontent; and here lies the danger. Unless youth presses forward toward the realization in part at least of his ideals, he will become, either moody and out of harmony with himself and life, or he will become a mere dreamer of dreams. We soon feel contempt for the one all of whose ideals are unrealized; ideals alone do not make a life significant; they must be backed by an active will; there must be brought about a union of reality and ideality. This calls for youthful courage, fidelity, and endurance; and it is the duty of the trainers of youth to encourage and hold the flickering attention to the prosaic task of realizing worthy ideals. The will must be tempered to the task; for there is a conflict continually going on between instincts, with their accompanying pleasant habits, and ideals; and youthful exuberance and love of pleasure are prone to follow the dictates of the moment, which are naturally instinctive in their origin. It is a conflict in which youth needs adult aid; but it is easy for adults to forget that youth has the really serious business of life on hand and that the conflict is being waged without the vantage-ground which age has reached. Those who sympathetically understand what is happening at this time can aid youth to conceive his ideals more clearly and guard them against particular momentary

impulses, and thus assist in conserving and directing the splendid idealism and energy of youth. There appears to be no more practical way of aiding the moral growth of adolescents; for the ideal serves as an archetype for the determination of action and character. As Kant asserts, "we have no other rule of our action but the conduct of that divine man within us, with which we compare ourselves, and by which we judge and better ourselves;" though we never really reach the ideal, as it fortunately keeps moving on. When the origin and the realization of his ideals have a seat in the will, the life of youth is greatly intensified and transfigured.

The foregoing rather general discussion of ideals and their function in moral development may well be supplemented by a brief account of the studies of youthful ideals that have been made by Barnes, Thurber, Klein, Friedrich, and many others; there is sufficient agreement to make the results suggestively helpful, and their findings will add concreteness to our thinking. All found that ideals depend upon many conditions, such as, age, social status, school education, environment, and sex.

If a curve is plotted to show the proclivity of any particular ideal, it is found that increasing age gives rise to marked changes. Barnes found that in general "local ideals die out and are replaced by world ideals;" this clearly makes for permanency and growth in the moral world, and is a safeguard against the loss of our social and moral heritage. As age increases, the ideals are drawn more and more from historical and public characters and heroes of philanthropy; and the ideal occupations pass from industrial to professional and technical pursuits. As adolescence advances, the youth is less impressed with things of material value, such as wealth and beauty, and his idealism turns more toward spiritual values.

The ideals of adolescents are greatly influenced by their social station; this well illustrates the fact, already noted, that ideals, like images, are built up from data already in the

mind. Poor children "look forward willingly to severe labor and the increased earnestness of adolescent years." At twelve there arises "the desire for the welfare of parents;" at thirteen the girl's ideal is to be a dressmaker, a clerk, or a stenographer; at fourteen the boy's ideal is a place in a bank or office. All expect to give up the joys of childhood.

Some of the studies show that ideals depend in a measure upon the kind of schools attended; the difference is marked between different countries. Friedrich found that among German children historical characters lead at first, due doubtless to the way they are taught history in the seventh and eighth grades; the immediate environment of the children seemingly had little influence. Neumann, who has given the matter careful study, thinks the difference in the ideals of German children is due to fundamental differences in the German school system.

As illustrative of the influence of environment, country children are more altruistic and show more originality in their ideals; American children show more "expansiveness of ideals" than the children of London; and a larger number of the girls in America choose male ideals than do English girls.

Perhaps sex plays the most significant part in the formation of adolescent ideals. According to Barnes, the girl is more likely to find her ideal within the immediate circle of her acquaintance than the boy; but there is a marked tendency, beginning with the on-coming of adolescence, to find an ideal in some historic or public character. Boys very seldom, and only when very young, choose women as their ideals; but in the United States two-thirds of the girls choose men. This seems very unfortunate, and, as Dr. Hall understands it, shows a "divorce between the life preferred and that demanded by the interest of the race;" and "saddest and most unnatural of all is the fact that this state of things increases most rapidly during just those years when ideals of womanhood should be developed

and become most dominant, till it seems as if the female character was threatened with disintegration." Girls are more conservative in their ideals than boys; they are influenced more by ethical and social qualities; while the boys admire military heroism and inventive genius. Mere prowess and courage appeal strongly to the adolescent boy; he naturally despises anything that savors of what he calls "yellow;" and, because of his experiences, his ideals of sportmanship are naturally more highly developed. With the boy, group solidarity is often exalted into an ideal; hence to weaken his allegiance to his group is to attack his idealism.

In concluding this discussion of adolescent ideals and the part they play in the upbuilding of moral character, it is of much practical importance to remember that the guidance of youth by command must now gradually yield to guidance by ideals; hence the shaping of conduct and character becomes more and more an affair of aiding in the formation of youthful ideals. It is well to recall Dr. Hall's summary concerning character: character in infancy is all instinct; in childhood it is slowly made over into habit; while in adolescence it can be cultivated through ideals. Thus the natural means of control at this period is that body of ideals which youth can be helped to form; and J. W. Slaughter believes that "his great problem and source of perpetual suffering is the chasm between what he is and what he desires to be," which is doubtless true of nearly all serious minded adolescents, and suggests that they really feel the need of the good offices of sympathetic adults.

With regard to the moral life in general it may be said, that the chasm between what one is and what one desires to be simply suggests the old struggle that has always gone on between the forces of sin and the forces of virtue; and this whole chapter has been occupied with an account of this battle royal which the adolescent wages, a warfare that usually waxes hottest during the middle teens, the time of exaggerated moral tenden-

cies, the time when the greatest number of first crimes are committed and the greatest number of conversions to a religious life occur. Something within continually insists: "Choose ye this day which ye shall follow," and significant is the choice.

Practical considerations make it necessary to bear in mind that moral maturity is not only the result frequently of a struggle, but also the effect of an evolution. From youthful impulses must be evolved character; from youthful passion and enthusiasm come the highest aspirations and the greatest deeds of which human beings are capable. G. H. Lewes has aptly compared the gradual toning up and harmonizing of the various dissonant elements of character to the tuning of an orchestra. "The changes slowly determining the evolution of character, when from the lawlessness of youth it passes into the clear stability of manhood, resemble the evolutions of harmony in the tuning of an orchestra, when from stormy discords, wandering in pursuit of concord, all the instruments gradually subside into the true key: round a small center the hurrying sounds revolve, one by one falling into that center, and increasing, at first slowly, and afterward with ever accelerated velocity, till victorious concord emerges from the tumult."

It is practical to remember that moral growth and maturity of character, like other progress in nature, come about and are conditioned by exercise; this certainly means a pretty generous, and, to some, alarming, degree of personal liberty and responsibility, much genuine expressional activity along many moral lines. Moreover this part of the treatment of youth must not be unduly delayed: in case of delay the spirited youth will simply take matters into his own hands and break away; or, as Dewey warns us, "if the germinating powers are not used and cultivated at the right moment, they tend to be transitory, to die out, or to wane in intensity." However, in the case of the high-mettled youth nature has pretty thoroughly guarded against moral powers being allowed to perish by des-

uetude, for he is generously endowed with a desire to "eat of the tree of knowledge of good and evil." For him danger lies in the wrong use of his moral powers. It would seem that the safest and most natural way to exercise the youth's moral judgment is to make him feel that he is part of a coöperating group and that on him rests a social responsibility; his loyalty to the group and its purposes should both restrain and stimulate him; in this way let us hope that he will learn the habits of response to social and moral situations. In this manner we coöperate with what Wordsworth calls "the benign tendencies in human nature and society." This phase of the subject is continued in the chapter on social activities, in which an effort is made to show that the school is something more than an intellectual workshop.

In conclusion, it remains to say a word concerning the persons best suited to aid the adolescent in his efforts to learn *how to live*, for this, in brief, is all that is meant by moral growth and development. Youth is naturally suspicious and sometimes scornful of the conservatism and inertia of older people; hence only those who remain youthful in spirit can hope to influence greatly the boys and girls in their teens. Earl Barnes says: "The passing generation smiles and cracks its weather-worn jokes about youthful effusions." The attitude that is shown by this kind of joking, which at bottom is often an exhibition of impatience, is extremely offensive to the rising generation, and adults who indulge in this kind of humor, are not taken very seriously by their youthful acquaintances; for they, in turn, are held in contempt by youth, who exclaim, "O ye of little faith!" It is extremely unfortunate that often, during the period when personal loyalty is the dominating characteristic, neither a parent nor a teacher is deemed worthy to be taken as an ideal by the youthful hero-worshiper; for, if there is any one influence that will make the adolescent's progress safe, it is that of a strong and good personality; only "a true

knight of the spirit" can lead venturesome youth to moral victory. Some one with strength of character and convictions must be at hand to speak out in unmistakable tones concerning the moral issues of life (there must be no preaching); this always requires judgment and sometimes courage. Finally, and most commonplace of all, he who would shape the moral life of any adolescent must embody the principles and truth that he would teach; Emerson was discerning enough to discover long ago that the reason people do not heed us is that "they see the mud at the bottom of our eye."

The vital subject of rendering help to the adolescent in his struggles toward higher moral living will be continued in a later chapter on "Moral Education."

PART II — HIGH-SCHOOL PROBLEMS

CHAPTER VIII

TRANSITION FROM THE ELEMENTARY TO THE SECONDARY SCHOOL

THE JUNIOR HIGH SCHOOL

I

One of the oldest and most insistent problems connected with the educational welfare of American children is how successfully to make the transition from the elementary to the secondary school. It is a problem whose solution rests on general psychological and educational principles, but it does not readily lend itself to a general solution; it must be studied and worked out, on the side of organization at least, in accordance with the needs and conditions of each community. It is at this point that our system of public education has been most frequently and vigorously attacked; and we are well aware that the critics, whether within or without the profession, have found no dearth of concrete arguments with which to support their various contentions. The elementary and the high school each frequently blames the other, and the recriminations have given rise to more heat than light. For many years the American high-school teacher has had to listen to the charge that less than half the pupils who enter ever reach the second year of the high school; and this charge has naturally been met by the countercharge that the elementary school does not properly prepare its pupils for high-school work. Besides the general feeling of dissatisfaction with the public school system at this point of transition, there have been scientific studies

which emphatically point to the necessity of a more explicit recognition of the interests and needs of on-coming adolescence, as well as, of the social demands which many pupils of this period will soon be obliged to face. On the whole, high-school executive officers have come to feel that the American high school, in spite of the many evidences of faith which the people have shown, is somehow on trial; and those responsible for the elementary schools are aware that there is something radically wrong with the work of the upper grades.

For these weaknesses of which we have so long been conscious many remedies have been tried both in the upper grades and in the secondary schools. But the treatment has not effected any real cure; alleviation at some points is the most that can be claimed for the most successful efforts at improvement under the old form of organization. These efforts to correct the faults and strengthen the weak places have taken shapes too numerous to mention. On the part of the elementary school, there have been the "enriching" idea, the reducing of the number of grades from eight to seven, the introduction of manual training and branches of home economics, the beginning of foreign languages, elementary algebra, and concrete geometry in the upper grades, the introduction of new courses in civics, organization on departmental lines, etc. On the part of the secondary schools, there have been tried an advisory system for first year pupils, supervised study for the earlier years, general science in place of the organized sciences, the direct method of attacking foreign languages, and the introduction of numerous vocational courses. But, viewing our educational system as a whole, the most optimistic do not claim any great success. The returns seem to indicate that the trouble is too fundamental to be reached by any or all such remedies as these just mentioned, and that no patching-up scheme will suffice.

Perhaps it is unreasonable to expect a great degree of success from a plan of organization which came about largely as a

matter of accident. At present it would seem that students of education do not attempt to justify our 8-4 plan by the psychology of childhood and adolescence, or by a comparative study of educational systems, or on the ground of local conditions and demands. The elementary part of our system, which may consist of seven, eight, or nine grades, came to this country before our present high schools were developed; it was imported from Europe, where it was devised by the aristocracy to serve what they thought to be the needs of the poor people and to train them humbly to serve and obey those above. Thus our 8-4 arrangement is a historical accident; yet, strange to say, it has now no exact parallel in Europe. Moreover, it is charged that the elementary school, as it now functions, leads nowhere; it neither prepares its pupils for their work in the secondary school, nor is it planned to fit them for their part in the world's work.

Instead of continuing this artificial and accidental arrangement, which, it is claimed, has made successful transition from the elementary school to the high school impossible for so many American youths, hundreds of cities and towns are reorganizing the curriculums of the seventh, eighth, and ninth grades, and introducing into the system a new unit, which has been most commonly named the junior high school. This form of organization has been recommended by nearly all the important surveys, and everything indicates that it is making a strong appeal to many of even the conservative educators. In an address before the National Education Association in 1916, the late Dr. C. H. Johnston said: "The junior-high-school movement is sweeping the country. It marks a general educational reawakening, renaissance, reconstruction. This Association has made it first a field of investigation, then a propaganda and slogan, now a constructive program for development." Whatever may be the outcome, it is certainly, when considered psychologically, the most radical and vital change that has

been seriously proposed in this country; and it would seem to furnish a solution of the troublesome problem involved in making the transition from the grades to the high school; for the new plan proposes to "bridge the gap" by means of the junior high school, one of whose functions it is to furnish a natural and easy transition.

II

This opinion concerning the function of the junior high school will doubtless appeal to all who have the point of view set forth in the first part of this book, a psychological viewpoint which will determine much of the discussion that follows. In the introductory chapter it was stated that there are two ways of deciding questions pertaining to either method or curriculum content; namely, by consulting the nature and the individual needs of the pupils, or, by studying the social outlook and trying to meet the needs of the community. Regardless of the relative merits and claims of these two criteria, the reader will expect to find the first adhered to throughout this and the following chapters, as indicated by the title of the book. To those who are imbued with the psychological method of determining pedagogical matters it will at once appear how completely and how perfectly the 6-3-3 plan of organizing the work of the public schools fits the various epochs of childhood and youth.

According to the new plan, the elementary school with its six grades practically parallels later childhood and preadolescence; and the work of this part of the curriculum, both as to content and method, is well suited to the nature and needs of children from six to eleven years of age, and seems to constitute a natural unit. As shown in Chapter II, this is the time and place to master the tools of education and accumulate a mass of fundamental and elementary knowledge necessary to all the various walks of life. It was also shown that by nature pupils during this period readily submit to dogmatic

instruction and much drill, both of which are necessary to a thorough grounding in the elements and a secure fixing of the habits of accuracy and rapidity.

The next stage of development in the individual, as explained in the third chapter, is early adolescence, covering indefinitely the years from twelve to fourteen or fifteen; it will be remembered that the onset of adolescence occurs about a year and a half earlier with girls than boys. Thus the junior high school proposes to take the boys and girls when most of them are about to enter the pubertal stage and try to deal with them as their nature demands during this "first flush of adolescence," when their aptitudes and interests, as we have seen, are changing and are very different from those of the preadolescent. The psychological view of this matter demands that we begin early if we are to influence the adolescent in a large and fundamental way; and it logically demands that we be able to recognize fully the great variety of individual differences, due to both nature and nurture, that at this time become so marked, the whole life of the early adolescent and his changing social demands being summed up in the phrase "increasing variability." This view further demands that we provide machinery sufficiently elastic to meet the varying interests and needs of early adolescence.

This is part of the proposed program of the junior high-school. Then, too, paradoxical as it may appear, following the last statement, early adolescence is a time when provision must be made for some sort of social solidarity. Boys especially wish to act in unison; they now desire to be one in spirit; they are not unlike the men of feudal times, who are their prototypes.

Thus the junior high school would seem to rest on a sound psychological basis; and its degree of ultimate success will depend upon the accuracy with which the educational experts are able to choose suitable subject-matter and fitting methods for this particular stage of development.

III

Although the junior high school seems to have suddenly made its appearance on the educational horizon, and the movement has been rapid, its history really reaches back pretty well into the last quarter of the nineteenth century. As in other movements, those who have contributed to it did so often without being aware as to what would be the ultimate outcome of their thinking and efforts. Doctor Eliot, when president of Harvard University, prompted largely by his desire to have students ready for college at an earlier age, began before 1890 to urge that secondary education should "dip down" into the last two grades of the elementary school. Then we find in the report of the Committee of Ten that each of the sub-committees, which were made up of experts, asked that work on its particular branch be begun in some simple form in the grades, "or as an alternative, the secondary-school period be made to begin two years earlier." Although it was not definitely recommended, the Committee clearly had in mind the 6-6 plan. During the last decade of the century, discussions on all sorts of educational reforms tending toward the junior high school became general in educational literature and at educational gatherings. President Butler of Columbia, in 1898, was probably the first to urge in this discussion a curriculum based on the nature and development of the child's mind. He maintained definitely that a period of six years is sufficient for elementary education and that the nature of adolescence should determine secondary education both as to the length of time and the nature of the work required. During the first four years of the present century, probably all the possible arguments both for and against the junior high school were brought forward. Dewey urged an equal division of the twelve school years, on the ground that such an arrangement would make possible a closer relation with social life. Then Hanus and Snedden claimed for pupils in the two upper grades the

right to vocational training; and the latter came out definitely for differentiated curriculums as a means of enlisting public interest and meeting the needs of the community. At the National Education Association in 1905, E. W. Lyttle urged that "secondary education should begin as soon as the elementary pupil has acquired the tools with which he may gain a higher education;" he then believed that this could best be accomplished by the 6-6 plan; and he definitely advocated for the high school differentiation along the lines of business, mechanical arts, and the professions. In his report to the National Education Association three years later, as chairman of the committee on six-year courses, Lyttle recommended a provisional curriculum for the seventh and eighth grades, which called for approximately seventy per cent required work and the remainder elective. An examination of the junior-high-school curriculums now in force shows about the same division between required and elective subjects.

Since about 1909 the movement has passed out of the stage of reports and recommendations, and rapid headway has been made throughout the country in the establishment of junior high schools. At the meeting of the National Association in 1912, Francis of Los Angeles described the work of his "intermediate schools," the name which seems to be in favor on the Pacific coast. Professor T. H. Briggs of Columbia, in his chapters on Secondary Education in the Report of the United States Commissioner of Education for 1914, states that one hundred and sixty-seven cities with a population of 25,000 or over then had junior high schools, as defined in his questionnaire; and since then this form of organization has increased still more rapidly. In the school year 1917-18, out of the 1165 schools in the North Central Association of Colleges and Secondary Schools, 293 secondary schools, that is, one fourth of the number reporting, claimed to have some form of junior-high-school organization, and twenty-five per cent of these were es-

established during the year covered by the report. However, this list is somewhat swollen by the names of places where the junior-high-school organization is certainly not complete according to the most commonly accepted definitions. In a number of instances, the new arrangement seems to be confined so far to mere organization, the complete changes in curriculum and method (which constitute the vital part of the movement) being expected later. Although suspended judgment is still the only safe attitude to assume concerning the claims made in many places of increased interest on the part of the pupils and patrons, of gains in enrolment, and of success in retaining pupils longer in high school, this sketch would seem to indicate that the junior-high-school movement is the most widespread and important educational development that this country has yet experienced; of the final results or of the complete success it is impossible to make even a conservative prophecy. Much will depend upon the degree of thoroughness with which the subject-matter and the method of treatment are made to meet the varying needs of the pubescent boys and girls of the different communities.

IV

This account of the junior high school may gain somewhat in clearness and completeness if we attempt to formulate a definition and state its purpose, although it is extremely difficult to deal in any formal way with a concept so new, complex, and rapidly changing. [Thus far it would seem that the junior high school is an organization of the seventh, eighth, and ninth grades into an administrative unit for the purpose of furnishing education and training suitable to the varied and changing mental and social nature and needs of early adolescents and at the same time meeting the vocational demands of the community by means of partially differentiated curriculums.] This statement implies a separate management of the three grades 4

concerned and a reorganization of the subject-matter on a sound psychological and pedagogical basis. It may also be understood to include an effort to harmonize the work of the school and the social outlook of the pupils. We should hope, too, that this definition includes a homogeneous atmosphere peculiar to the age and condition of the pupils of the school. It is proposed, also, to effect greater unification by means of some kind of departmental arrangement, and greater flexibility is gained by subject- rather than class-promotion. [According to the conception set forth in this definition, the junior high school is much more than a mere scheme for "bridging the gap between the grammar grades and the high school," as Stetson defines it, although it is sincerely hoped that it will accomplish this; and it certainly has a more unique and independent function to perform than simply "to give the pupils an opportunity to become familiar with secondary-school organization, customs, and manners," as Tomlinson maintains, although this is doubtless a real advantage to the pupils. Finally, the definition implies something more fundamental and vital than a convenient arrangement for "an earlier introduction of pre-vocational work and of subjects usually taught in the high school," as Briggs defines the junior high school in the Report of the United States Commissioner of Education in 1914, however important both of these objects may be. Six years later, Briggs gives expression to a much deeper insight regarding the junior-high-school movement; and his form of statement suggests the viewpoint of this discussion. "In its essence," he says, "the junior high school is a device of democracy whereby nurture may *coöperate with nature* to secure the best results possible for each individual adolescent as well as for society at large."

From the standpoint of this book, if the junior high school is not founded primarily on the psychology of early adolescence as to curriculum, administration, and method, it forfeits its

claim to exist as a separate educational unit, for it will not have any distinct pedagogical function. It is only because so much work has been done in the field of adolescent psychology that the evolution of a junior high school on a scientific basis is possible; and no principal, or other school officer, should try to do constructive work for this worthy cause unless he has a working knowledge of the latest findings concerning adolescent nature; as Dewey has shown, the focus must always be first on the educand.

Moreover, the aim or purpose of the junior high school is frequently stated in terms of social and industrial efficiency; this would seem to be yielding to the immediate needs of the community, a procedure that many believe may not in all cases be conducive to the most complete development of the individual pupils; but, when the directors of the country's industrial and economic activities are asked to declare themselves on this matter, they urge "the necessity of an education whose chief purpose is to develop initiative and personal resources of intelligence," as Dewey phrases it. This, it would appear, is but another way of saying that, if the purpose of education at this point is to discover and develop the strictly personal powers and characteristics, it can be brought about with more certainty by those who best understand the nature and aptitudes of the pupils and are most alert in recognizing their many powers and possibilities as fast as they appear; thus we are brought back again to a knowledge of child and adolescent nature as the only safe foundation upon which to build.

V

There are indications that the junior high school in its present stage of development is in danger of becoming merely an administrative device; if this should happen, doubtless our public schools would profit to a certain extent in the matter of organization; but the movement would fall far short of its possibili-

ties. It is especially to the modifications that are urgently needed in the curriculum and the methods of presenting subject-matter that we are to look for the changes that are really vital, because it is here that the peculiar claims of the pubescent group involved can be fully met. Hence much of the remainder of this chapter will be occupied with a discussion of the curriculum and methods.

Although the curriculum suggested later is the result of the most progressive thought and practice of many leaders in this movement throughout the country, there is nothing very novel or strange as it appears on paper. The most radical differences are to result from a thorough overhauling of the subject-content; this is necessary to place the work of the school on a firm psychological basis; this revision will involve considerable elimination of non-essentials, some condensation, the introduction of new material of a concrete nature, and much correlation with the work of the elementary school and the senior high school. This is a problem to be worked out gradually by each department of instruction. The result should be courses considerably modified both as to material and organization, rather than a curriculum made up largely of new subjects.

In the making of a curriculum for the junior high school there are a few guiding and, as it seems to the author, fundamental propositions to be held in mind; some of them it must be admitted are still in dispute, hence they are not principles in the fullest sense of the term.

(1) As in other schools, the number and nature of the subjects placed in the curriculum must be carefully limited by the size of the school, the number of teachers on the staff, and the resources of the supporting community; but the aim of the junior high school cannot be reached nor its essential characteristics developed without an enriching of the program of studies.

(2) All subject-matter must be adaptable to the needs, interests, and aptitudes of the pupils who are entering and passing

through early adolescence. This is a proposition easy of statement but difficult of application; for it demands at every point a sympathetic knowledge of adolescent nature and a sure feeling for the elements of the subject-matter that are suited to the purpose in hand. The proposition may be understood as supplementary to, or helpful in the application of, the one just stated.

(3) Nearly all the subjects placed in the curriculum should be rich in content; pupils in these grades are entering a stage of development when content is much more important than form. The demands of boys and girls of this age for a richer and more vital content is a natural expression of their broadening interests.

(4) The curriculum should emphasize "the systematic mastery of race experience as the basic condition of human welfare and human progress," to use the language of Dr. Bagley in his now famous paper read before the department of superintendents in 1914. There must be subjects that will furnish "a common basis of certain ideas and ideals and standards which go a long way toward insuring social solidarity — a basis of common thought and common aspiration which is absolutely essential to an effective democracy." It is not necessary to remind readers familiar with educational discussion that this proposition has been much disputed; it opens the whole question of vocational and cultural studies and their place in our educational scheme, a field of discussion which cannot be entered at this point. However, the present author is convinced that Dr. Bagley's claims are well founded and can be met by making about three-fourths of the work in the junior-high-school curriculum required of all pupils. This can be done without ignoring the demands of the second proposition. We must guard in every possible way against class stratification. Bagley and Judd have said jointly: "A school which gives to one class of children one set of ideas and ideals, and to another class an

entirely different set of ideals, will make for social distinctions that are dangerous in a democracy." This proposition implies what several recent writers have been pleased to designate the *integrating* function of education.

(5) The curriculum must be so arranged and administered as to make it possible for a pupil without loss to change his plan of work if he changes his purpose. There must always be an "open track." The pupil must at every step be master of his own fate. From an administrative point of view this is not always easy; but if matters are not so managed, the schools will not be true to American principles and ideals, which demand that the door of opportunity be always kept open.

(6) For many reasons the curriculum must provide for individual differences. Our study of adolescence taught us that individual variation is the law of this period of development, and that in all dealing with adolescents this is a major consideration. At this time individuals differ increasingly in ability, interests, tastes, and consequently in needs; all recent investigations are emphasizing this fact; and the curriculum must not fail to recognize it. The pupil must be given that education and training which will most fully develop all his particular powers; and Dr. Johnston has reminded us that "no common elements can produce similar effects. Here it takes *uncommon elements* to produce similar effects." From the viewpoint of this book, all this is fundamental; but we reach the same practical conclusion when we attempt to meet the diversified demands and prepare for the manifold duties of the democratic society in which the boys and girls are soon to play their parts. Thus at this point the principle of individual development and the demands of social efficiency meet; what is well for the individual is also serviceable to the community. Hence, whichever criterion we use, curriculum differentiation is a crucial issue; without it the junior high school will fail to perform its most important function.

(7) Although vocational needs are not ignored, strictly vocational subjects should not find a place in the curriculum. To this negative proposition all educational leaders will not assent. There seems recently to have been a growing demand that the training given by the public schools shall be directly helpful in the individual's struggle for a living; this demand appears to grow out of the feeling that in the past the cultural side of education has been overworked to the neglect of the practical, industrial, and vocational; and in some places the employers of labor have added their influence. But let us beware of the swing of the pendulum. It can be shown that, when the welfare of the individual and the demands of the wider community are viewed in the long run, early specialization is not only unpedagogical but also unfortunate. Bagley and Judd, in their joint article, warn against the term "enrichment" being understood to include "a limited course preparing for a trade." With their joint authority, they contend that "to give early a limited occupational training will tend (1) to set up class distinctions, and (2) to deprive large numbers of children of the broad basis of general and liberal training, which is essential to successful democracy." However, there can be planned courses in the practical arts that will serve as a means of general culture (using the term culture in the broader sense explained in a later chapter) for the motor-minded pupils; but care must be exercised that this principle of selection of studies does not degenerate, as one writer has expressed it, into "a sorting process based on social distinctions." Then, too, early adolescence is not the time for any form of intensive work in the narrow sense, as has been made clear in Part I; and, in its practical workings, it is opposed to the policy of the "open track," already formulated. Whatever vocational aspects they may have, all the courses must be intellectualized and permeated with the atmosphere of the school, which in the last analysis is cultural. However, the junior high school can always draw with profit from

the vocational activities of the world such materials and problems as will make the work of the pupils more significant and consequently more appealing.

The number and variety of subjects suitable to the needs of boys and girls from twelve to fifteen years of age has now become sufficient to make room for intelligent choice; one could probably list double the number of subjects that any pupil would be able to take. This wealth of appropriate subject-matter has come from two sources: those responsible for the elementary schools have been diligently organizing subjects with which to enrich their program of studies; and the high schools, with a view to vitalizing and giving greater variety to their work, have been adding subjects so rapidly to their many curriculums that subjects are crowding each other out. Thus, there is sufficient material that has been tested from which to build the junior-high-school curriculums. And recent experience in this matter seems to point clearly to the conclusion that it is easier to introduce new subjects when the 6-3-3 plan is in operation than under the old form of organization, the fact being, as Briggs has called to our attention, that only a relatively small number of elementary schools have introduced even one or two of the subjects that nearly all the junior high schools are freely offering their pupils. The flexibility of the new form of organization lends probability to Snedden's opinion that the junior high school will repeat the history of the four-year high schools and the colleges, wherein the increasing range of subjects has been a continuous sign of vitality.

Notwithstanding the endless discussions that have been running in educational literature and the much speaking that has been indulged in at educational gatherings since before the Committee of Fifteen made its report, and in spite of the enriching process that has resulted, we know that from the standpoint of the pubescent there has been in the seventh and eighth grades much dreary duplication of the subject-matter of the

earlier grades. The impatience of the sated boys and girls ought to suggest that something is seriously wrong with the many reviews with which the conscientious teacher fills in the time. The text-books used in the upper grades contain little more than elaborations of the topics studied in the lower grades; even newness in the manner of treating the topics is often lacking. No great degree of wisdom is required to see that, by persisting in our efforts at rounding out and completing the pupil's knowledge of the elementary subjects, the law of diminishing returns becomes operative with the consequent loss of time and energy. Of course all this monotonous repetition has been planned in the interest of thoroughness, which is certainly a virtue, but many of the pupils have not been able to get our viewpoint; to them it has seemed a discouraging marking of time, against which many of them (especially the boys) have rebelled and sought activities outside the schoolroom in which there appears to be some progress and hence some significance. In spite of the teachings of the psychology of adolescence, we in our conservatism have gone on assuming that the boys and girls who are passing through early adolescence, with their new outlook on life, will endure the same deadening drill and dogmatic treatment to which the preadolescent willingly and profitably submits; this is especially true of such subjects as arithmetic, grammar, and geography. Those who believe in the junior-high-school movement say that all this can and must be changed by making the character of the work offered and the method of presenting it fit the stage of development that the pupils have reached. When we consider the maladjustments in the upper grades and the alarming mortality in the first year of the high school, it is not surprising that this point has been the storm center of the adverse criticism directed against the public schools for the past ten or fifteen years.

Besides being inspired by the idea of thoroughness for its own sake, educators have hoped that somehow much drilling

and repetition during the last years of the elementary school would better prepare the pupils for their work in the high school and thus reduce the number of failures, which the teachers of the grades have not had reason to view with pride. Yet, notwithstanding this effort, the troublesome and, to many pupils, fatal chasm between the two schools remains unbridged. As some one has suggested, a pupil, on leaving the elementary school, may well burn his books, as he will never need to refer to them again; he is plunged into subjects which seem startlingly new and strange. Although "bridging the gap" is not the primary function of the junior high school, as already defined, it is confidently believed that the new curriculum will so merge the work of the junior and senior high schools that there will be no gap and therefore no problem of bridge-building.

What, then, are the new subjects to be placed in the junior-high-school curriculum? And what changes of content must be made in the old subjects? Dr. C.H. Johnston has distinguished between the two kinds of curriculum making; one he describes as clerical and manipulative, and the other as characterized by discrimination based on carefully worked out educational theory and insight into the needs of individuals and groups. Mere shuffling of the courses can give no assistance whatever in solving this problem; it is not a case of revamping; the problem is new and too delicate to be dealt with in any mechanical way. It is a problem, however, of building much old material into an entirely new structure.

1. Because of its practical use, as well as its cultural value, all junior-high-school curriculums require some kind of work in English throughout the three years. This should include and correlate all the work in reading, literature, grammar, composition, spelling, and penmanship. If the reader has in mind the characteristics of early adolescence, as described in Part I, he is aware that there is developing in the youth a great eagerness for real and intense expression, that in many of his reactions

the motor elements are very prominent, and that social instincts and influences are beginning to play a large part. This is an age when words and forms of expression are naturally interpreted in terms of physical reactions rather than as images or abstract ideas. This surely suggests that the curriculum of the junior high school should provide work in English that deals with immediate situations, situations that are so real and interesting that the pupil feels the need of expression. This means that the work must be closely related to his life; this may take the form of vocational activities, school interests, athletic sports, or "stunts" of various kinds; that is, the work must be so managed that the raw materials for training in English expression are the pupil's natural reactions to the situations in which he is placed, thus giving significance to the content of his themes. When adolescent enthusiasm growing out of real situations is so directed that it seeks self-expression, a real opportunity for that expression must be forthcoming; then the skilful teacher will be at hand ready to show the pupil how the ordinary tools of expression can all be made to contribute to his now urgent needs. These tools will include clear, correct sentences, words that fit the purpose, correct spelling and neat, legible penmanship; all these matters of form must appear as means to the end, the end being determined as far as possible by the pupil's initiative. The course must lay but little emphasis on the finer technique; for the wholesome adolescent is impatient with the finer distinctions, which appear merely as impertinent interference with the realization of his purpose. In other words, on the side of form nothing beyond a fair degree of mastery of the larger essentials should be sought, for monotony must be avoided at any cost. The materials included in this course should be rich in content; that is, they should contain ideas and experiences which touch the active life of the pupils.

Remembering the imitative instincts of the period, there should be considerable reading to the pupils by a teacher who

can do it with a compelling charm; this is a natural way of impressing upon the pupils the real significance and function of good form. Because the motor activities constitute so much of life at this time, there should be much opportunity for oral expression, both oral reading and oral composition; now is the time when youth wishes to do, to express; and in this he needs much training, for his power to appreciate during adolescence naturally outruns his power of expression.

If we are not forgetful of the social instincts due at this age, part of the work in English will take such form as to seek the approval of the group; this may be done in the classroom, at the school assembly, in the school paper, at public entertainments, or in literary organizations. Because personal loyalty is the prominent will-process during early adolescence, much of the English work of the curriculum should be made to appear as follow-the-leader stunts; thus the teacher must be enthusiastic and competent in the eyes of the pupils if they are to consider him worthy of leadership.

2. If the work of the school in English is important on the side of form and expression, its work in science should be important on the side of successful and purposeful action; and all junior-high-school curriculums thus far proposed require some form of elementary science. Psychological considerations demand that we make use of the rapidly expanding adolescent interests, especially the natural inquisitiveness which sometimes amounts to almost insatiable curiosity; this work can be made to contribute to the future welfare and satisfaction of the individual and aid in laying the foundation for material progress. The aim of the work, to use the language of Professor F. D. Barber, a recent writer on elementary science, should be "to give, as far as possible, a rational, orderly, scientific understanding of the pupil's environment to the end that he may, to some extent, correctly interpret that environment and be master of it. It must be justified by its own intrinsic value as a training

for life's work." Incidentally the pupil may learn which of the special sciences he prefers and build a foundation for his later work in these sciences. The topics included in this course should be drawn largely from the life of the pupil and the community, and much of the work should take the form of projects. Because the matters treated are somewhat familiar to the pupil and often closely connected with his experiences, they will have real significance and hence interest for him. The presentation must be as concrete as possible.

At this age pupils are not much interested in things either abstract or highly specialized; they seek knowledge in broad, naturally connected masses; this means dealing with things as wholes and in the large. 'Incidentally the pupil will, we believe, come to appreciate scientific problems as such and get some notion of scientific method.' In English the rules and forms of oral and written expression are taught incidentally through actual use; and in the science work of the junior high school scientific principles and methods are gradually inculcated through concrete experience and application; the same pedagogical principle applies in both lines of work and rests upon the same psychological basis. In manual training the project method has proved very successful; elementary science should employ the same principle in dealing with its problems.

The recent discussions setting forth the merits of general science have brought to bear on the science courses and the teaching of elementary science much helpful adolescent psychology; and whatever the form of organization that may be given to the science work of the junior high school, the advocates of general science have made a real contribution by placing the emphasis on the psychological aspects of the problem.

Further, it can be shown that the content of the science which is adapted to the interests and aptitudes of the pubescent is equally well suited to the needs of both the pupils who leave school early and those who remain to complete a well-rounded

education in science: for the first, it is the most practical equipment we can give them both for the uses of the individual and for the demands of society, since the fundamentals are learned in their proper setting; for the second group, it has opened up in a broad way a great and interesting field of growing human knowledge and at the same time equipped the learner with some simple, fundamental principles of physics, chemistry, and biology for use on the way. The curriculum may well include work in elementary physical science, geography on a physical basis, elementary botany and zoölogy.

3. For many reasons it seems best to require continuous work in some form of mathematics throughout the junior-high-school curriculum. In general, the interests and needs of the pupils will be better met if a wider range of mathematical facts and principles is attempted, provided the practice given to fix these facts and principles is made to touch life closely by means of much varied and purposeful experience. Due to the careful scrutiny that the elementary school has been receiving, arithmetic, as taught, has come in for its share of adverse criticism, especially the work of the seventh and eighth grades. It is demanded that many of "the formal phases that can be justified only by tradition or by belief in the discredited doctrine of formal discipline" be eliminated, and that the wasteful, unmotivated reviews that now consume so much time and energy, to the disgust of many of the pupils, be stopped. However, the mathematics of the junior high school should include considerable arithmetic, because it can readily be related to the pupil's immediate interests and his efficiency in calculation must be maintained; but, like the work in English and science, it must be vitalized by a closer correlation with the social and economic conditions which surround him and especially with the pupil's work in elementary science, mechanical and commercial subjects, and industrial art. The choice and arrangement of material and the methods of presentation are not to

be determined solely by "the logical requirements of mathematics" but by the viewpoint of the pupil and his occupational and social needs. This means that manipulation as an end finds no place. The mechanical phases of the work will be emphasized only when needed to understand and fix mathematical principles.

The most advanced doctrine relative to junior-high-school mathematics calls for the following: only "the necessary social and economic uses of arithmetic, intuitive geometry, a few pedagogically selected topics in algebra, and numerical trigonometry." These are not taught tandem, and there is to be little emphasis upon the old-time divisions of mathematics. Schroeder and Clark demand that the topics be introduced "in such a way as to insure a maximum of direct and intense application, flexibility, and significant interrelation;" "the unity of space and number" must persist throughout. The material is to be socialized "through a series of activities, projects or problems requiring coöperation and sharing of interest, efforts, and results." The content and method are to be determined largely by considering the pupils' present interests and needs, rather than with a view to preparing him for subsequent courses in mathematics. However, the pupil must not emerge without some degree of skill in the use of the commonly accepted mathematical tools, and he must possess certain important mathematical habits and ideals. All must be planned as though the pupil's acquisition of mathematical knowledge and formal training were to end with the junior high school, the thought being that all subsequent work in mathematics will be elective.

Although all this and more is suggested by the practice and experience of European schools and probably meets the approval of the National Committee on Mathematic Requirements, the conservative reader will pause and consider while he allows others to do the experimenting. However, the skilful teacher

of arithmetic will make use of the simple equation and the unknown quantity when these will render aid in solving simple problems. The work in mensuration naturally leads the teacher to use intuitive and constructive geometry; and, since this work in geometry is so concrete, it is intensely interesting at this time. The work in constructive geometry leads by easy steps to many formal proofs.

If the work in algebra is done in the second year, it should concentrate on a few topics, such as, the use of the formula, the simple equation, the graph in its simplest applications, and negative number. Nearly all of the mechanical phases of algebra can be easily taught in the second year of the junior high school; and the application of the equation to type problems is not beyond the ability of pupils of this age. The mathematics of the third year should include all the algebra that is required. The work of the junior high school should call for the exercise of common sense in computing with approximate data; the pupils are old enough to enjoy and profit by this form of exercise. If the more technical forms of business arithmetic, such as, stocks, bonds, and insurance, are taught, they should come late in the course, as they require considerable maturity of mind and greater mathematical knowledge.

The work here indicated can be made a somewhat closely correlated course, for much of which carefully worked-out texts can be had; or the proposed work of the various branches may be given tandem instead of parallel. The author has experimented with both plans, but is not ready to decide between them; both have advantages and both have disadvantages too numerous to discuss here. Whatever the content and arrangement of the courses in junior-high-school mathematics, the aim should be, as Prof. E. H. Taylor of the Eastern Illinois State Normal expresses it, "to make the study of mathematics less formal, and make it more intuitive, concrete, and practical; and to give to the instruction more unity." As he sug-

gests, the organization of the junior high school offers an excellent opportunity to put this unifying idea into practice, and thus return to some of the recommendations of the Committees of Ten and Fifteen.

4. History and civics, when properly taught, help the pupil to interpret his immediate social and political world and hence to act more intelligently and effectively in all his relations with this complex world. This is the justification of requiring all pupils in the junior high school to pursue courses in United States history, local and elementary civics. The other benefits of a more general nature in the guise of mental training, that are usually claimed for the study of history, will come as by-products, but they are not the less valuable.

The budding social instincts of early adolescence prompt the boys and girls to begin to be interested in their immediate social surroundings; hence the following statements of A. A. Douglas concerning method and content are in keeping with the psychology of the period. He advocates that we "begin with the study of the civic and economic problems in the immediate environment, and follow these as they lead outside the home and the school to the city or community, state, and nation," the "social factors affecting the life of the child" receiving the first attention. "Such topics as community health, industrial conditions, public recreation, city government, etc.," are suitable for all; and he insists "that the pupil be brought into actual contact with the problems he is studying." Again we meet the doctrine of the concrete and the tangible.

Moreover, the history taught, as Tryon affirms, "will be planned for the sake of the pupils taking it, rather than for the sake of the subject." This means that the history of the junior high school "must be made to function in the form of a key to a right understanding of present-day conditions." It should serve as a background for the things that are happening in the immediate present, and, like the work in science, aid the

pupils in making effective connections with their surroundings, the one helping them to fit into their physical, the other, their social environment.

So far as the students of this matter are able to learn through questionnaires and other sources, the program here proposed will mean in many school systems a radical transformation of method and subject-matter. The work here recommended should continue through the first two years. Ancient history is well suited to the pupils of the third year, as experience in many schools has shown; it is interesting at this age because of the material with which it deals and it opens up a new field for those who leave school when the work of the junior high school is finished; and it is the beginning of a new cycle for those who continue their history work in the senior high school.

5. Because of its universal appeal and because the schools should train the individual for the proper and safe enjoyment of his times of leisure, some work in music and art, suited to the age and interests of the pupils, should be required of all. There should also be a carefully worked-out course in physical training extending through the three years; this should include everything which has been found to contribute to health and the up-building of a strong and efficient body. For this claim arguments are not needed.

The required subjects here suggested will provide for what Dr. Bagley chooses to name general education, having for its content the "materials and processes which will be of probable value to every individual whatever his specific occupation or mode of life may be." These studies are to aid the youth in taking possession of the inherited "race experiences," which form "the basic condition of human welfare and human progress," a rich inheritance of which no one must be deprived; it should constitute the educational background of our democracy.

What subjects are to be elective? The answer to this ques-

tion involves some things that are new to the grades under consideration, at least so far as applies to most school systems. When the content and presentation are adapted to the age and development of the pupils, there are many and strong arguments for the following: Foreign languages, including Latin, French, and Spanish; subjects that contribute toward a business training, including business English, commercial paper, business methods, elementary bookkeeping, and typewriting; manual training, with most of the time given to bench work; practical cooking and sewing, household management, and food preservation; and agriculture, taught as concretely as conditions will permit. Not many junior high schools will find it best to offer all of these electives; local demands, equipment, and the resources of the community must determine. Although unlike the program of studies of any particular school, the foregoing is submitted as being typical of the most progressive curriculum making thus far undertaken.

The question remains as to what form this proposed program of studies shall take. Shall we arrange the subjects for each of the three years in two groups, making one group "required" and the other "elective;" or shall we build from the subjects suggested distinct curriculums such as are urged in a later chapter on the curriculum, the number and nature depending on the size of the school and the needs of the community? In the junior high school this would seem to be largely a matter of administration; the outcome for the individual pupil will be about the same, provided the suggested seventy per cent of the work is taken from the required group of subjects which furnishes the basis for a general education. Some writers and a few administrators claim that this leads to a little more flexibility in management than the curriculum system, a quality to be sought by every practical means. In case the curriculum method of combining subjects is used, it is suggested that at least five separate groups may be offered and designated as,

Business, Home Making, Mechanical, Agricultural, and Foreign Language. It will be understood that everything that has been said concerning the junior-high-school curriculum is tentative in the extreme; the whole field is rapidly changing, and the entire subject is in a formative condition.

VI

Appropriate methods of dealing with early adolescent boys and girls have been touched upon incidentally in our discussion of the curriculum. Since the major argument for the junior high school is that it makes easier the introduction of various improvements in method, any account of the movement that did not attempt to point out pretty definitely some of the proposed reforms would be very incomplete. A few writers recommend "a wise compromise" between the methods of the lower grades and those of the high school; but this is too indefinite to be of service, and it is not psychologically sound advice. To the author improvement in method seems by far the most vital change that this new form of organization makes possible, for it is at this point that the psychology of adolescence and the newer principles of sociology can be most directly and intimately brought to bear. Unless those responsible for the junior high school are earnestly to set about applying all that is latest and best in the studies of the leaders of educational thought, it would be better to retain for a while at least the older form of organization, as something established and therefore more convenient.

It will be remembered that our study of preadolescence led to the conclusion that the business of the elementary school is to give the pupil control of the educational tools, that instruction may profitably be quite dogmatic, that children of this age readily submit to the necessary drill and the habit-forming processes, that their instincts and impulses must be organized along practical and effective lines, that vast stores of useful

information may easily be accumulated, that the motor centers should be trained and developed, and that, because this is the time when the individual is entering into his common racial inheritance, there are many common tendencies and characteristics to which the school may effectively appeal. But all this pedagogy of preadolescence must be gradually given up in the junior high school, because of the vital changes that are taking place in the pupils, changes involving many new interests and demands. Most of the failure charged against the upper grades of the elementary school has come from the rigidity of method which did not recognize the changing interests and needs of the pupils. As we have seen in the earlier part of this book, new cell connections are now being made in the brain and these form the physical basis of the associations that are now being established, which largely determine the character of the individual. Individual inheritances are now being differentiated, as shown by the appearance of special abilities; and it is very important for the development and welfare of youth that these new variations be discovered when they emerge and that they be dealt with according to their nature. This clearly suggests that the methods employed at this time must be much more flexible, readily adjustable to the individual demands of the varying personalities that are now forming. The personal equation is now beginning to play so important a rôle that it cannot safely be ignored; all boys and girls at this time are exceptional and no stereotyped method will deal effectively with their changing and varying powers.

In place of the early dogmatic methods, there must be a more frequent appeal to reason, which is now developing; facts must be presented in their natural and true relations to each other and their essential relations to life. The pupil's own individual thinking and opinions should begin to have recognition in the work of the classroom; this means an increasing freedom in discussion. This is the most practical way to make

sure that the instruction is significant to the pupils; and, because it has not been more significant, especially to the larger boys of the upper grades, they have become restless and often disgusted, and they have naturally transferred their efforts to other activities that to them seem to have more meaning and are consequently more interesting. The Gary system has been successful in reducing eliminations because it has made instruction significant to the pupils; there one may find the educational principles and the spirit needed in the junior high school, although Gary does not have that form of organization.

Again, the nature of early adolescence demands that the subjects of the curriculum be given extensive, as distinguished from intensive, treatment. Youth prefers to deal with rather large masses of knowledge; and there must always be movement if there is not to be monotony. This method of treatment is, not only suited to the broadening interests of the pupils at this stage of development, but is best from the standpoint of their future educational welfare; for, whether they leave school early, or continue through the senior high school and college, it is psychologically right and helpful to get a bird's-eye view of the fields of human knowledge and see things in their large relations. This is the natural way to learn to discriminate relative values, and, as we have learned, the adolescent needs much help in the building up of his mental perspective.

Once more, if we are mindful of the independent personalities that are now appearing, there will be a gradual increase in the degree of responsibility placed upon the pupils. This is to the pupils a welcome change, because it is a recognition of their individual importance; and their instinctive desire for approbation tends to make them measure up to what is expected of them. This law of human nature is one that should now rapidly become operative. The form of organization of the junior high school, which is likely to be somewhat similar to the usual

high-school organization, readily lends itself to the placing of more responsibility in the matter of conduct; this naturally calls for more self-control, a factor in human development of the greatest importance. Thus we have provided a natural transition from the elementary school to the higher schools.

In connection with our account of the curriculum, it was frequently suggested that the method of presentation should be concrete whenever practical; this is pedagogical, because the pupils with whom we are dealing are still interested in things and movements, rather than abstract motives and principles. Abstract ideas must be built up largely by contact and experience with the things of which these ideas represent the qualities, and the fundamental principles which we wish pupils to learn can best be obtained in their concrete setting. It is this phase of educational reform that several writers of recent text-books have had in view when developing the "project method" in connection with manual training, economics, agriculture, and elementary science. The older writers would call this the inductive method of approach; but it is more than the older school had in mind or ever put in practice. The newer theory demands that larger units be dealt with, and that we seek the rules and principles as they are found operative in the outside world, rather than in the experiments of the shop and laboratory; it assumes that the range of experience is not exhausted by the old-time studies and the stock experiments of the schools. There is little doubt that this new mode of approach gives greater pleasure to the pupil; this is what Bagley and Judd mean when they say, "it is just at this point in the school that the pupil, made acquainted with the fundamental tools of experience in the lower grades, finds himself entering productively into the enjoyment of his achievements."

What is here urged concerning the methods of the junior high school can be summed up by saying, the one great aim is the conservation of the enthusiasm natural to youth; this en-

thusiasm is vital to his wholesome psychic life and hence to his development. Monotony at any time is objectionable, but in dealing with pubescent boys and girls it is a cardinal educational sin. Much of the misconduct of the early adolescent, including his disgust for and his rebellion against the work and regulations of the schools, is a kind of reflexive resistance to the monotonous and hence hateful conditions; in his vernacular, there is "not enough doing." Or, we can sum up by saying, the enthusiasm natural to youth will be conserved when the content and methods of the school work, including all the activities, are made to conform to the particular stage of development that the pupils of the junior high school have reached.

VII

For a few years there will doubtless be considerable difficulty in securing enough well qualified teachers if the junior high schools increase in number as rapidly as they did during the first five years of the movement. Because of the more complicated form of organization made necessary by the junior high school, there will come increased responsibilities and difficulties in administration and discipline, and these must be shared by the teachers; more ability to coöperate will be demanded than is required of seventh and eighth grade teachers under the older form of organization. A broader educational outlook will be demanded as part of the teacher's equipment. But the important requisite to insist upon at the start is that the teachers shall have clearly in mind the junior-high-school idea or viewpoint and are enthusiastic concerning the movement. Since the pupils of this school are about to enter the estate of manhood and womanhood, it would be a real advantage to have the teaching staff equally divided between men and women; but this is not generally true in the senior high school and will probably not be practical for some time in the junior high school. A study of the matter by A. J. Jones of the University of Pennsyl-

vania has convinced him that there is on the part of school officials a "general insistence upon a knowledge of children and sympathy with them;" this is certainly of prime importance. Practical courses in preadolescence and early adolescence should aid much in giving teachers a working knowledge of the periods of development involved and contribute toward a pedagogical appreciation of the subject-matter dealt with.

At the beginning superintendents wisely selected their junior-high-school teachers from the upper grades of the elementary school who seemed best qualified for the new work and high-school teachers who had had experience in the grades. This is the best that can be done until specially trained teachers can be obtained and there probably will soon be enough trained teachers for this work if the junior-high-school movement continues; for in all fields of activity a demand usually creates a supply. Already educational experts in many colleges and normal schools are offering courses in junior-high-school problems. A terminology of the subject has been developed; and a voluminous literature is rapidly making its appearance. In some parts of the country definite standards have been set. In California a holder of a normal school diploma with one year of college training or a holder of an elementary certificate with two years of college training may be granted a permit to teach in the junior high schools, there called "intermediate schools." In Hannibal, Missouri, the requirement is "not less than two years of student work of college grade pursued under conditions where the professional phase of teaching is predominant," as well as successful experience in dealing with pupils of adolescent age. Professor Cubberley, in his report of the Portland survey, recommends the following minimum requirement: "(1) graduation from a four-year high school; graduation from a standard normal school; one year of actual experience in teaching; followed by at least two years of college work, with preparation for special branches to be

taught, or, still better, (2) college graduation, with practice teaching experience; or (3) the promotion of eminently successful teachers within the system, favoring those, other things being equal, who have had a year or two of college work or who have travelled abroad." At its meeting in 1918, the North Central Association of Colleges and Secondary Schools recommended, "that the standard of preparation for the teachers of the ninth grade of the junior high school be the same as the standard now administered for secondary teachers by the North Central Association," and that "an equally high standard of preparation for the teacher for the seventh and eighth grades of the junior high school should be insisted upon as soon as practicable."

This fixing of standards and training of teachers will soon overcome the initial difficulty here under discussion. In support of the high standards that are being advocated, the Fifteenth Year Book of the National Society for the Study of Education quotes the opinions of about twenty-five superintendents and other school authorities concerning the training necessary for the junior-high-school teacher, and a large number favor normal school training with a year or two of college work in the teacher's special subject; and the teacher for "this most trying stage of common-school education," as Professor H. A. Hollister characterizes it, should have experience; teachers can more safely experiment in the senior high school with pupils of middle adolescence than with the pubescents of the junior high school. To the author it seems that the most valuable experience preparatory to this work can be had in the elementary school; a teacher with sufficient educational background, who has just had a year or two of successful upper grade experience, will enter upon the duties of the junior high school with the enthusiasm natural to one who feels the stimulus of a well-earned promotion.

In general, we may be pretty sure that the final outcome will

be the bringing into the public school system more good teachers. The difficulties that have always been experienced in securing a sufficient number of suitable teachers for the upper grades will be largely overcome by the attractiveness of the junior-high-school positions; and it is believed that the principalships of these schools will be likely to attract good men, whose influence will thus earlier be brought to bear on the boys of the community.

VIII

Professor A. J. Jones reminds us that nearly all the reforms in American education have been concerned with changes within the system; but that "within the past ten or fifteen years criticisms have been pointing more and more toward the organization;" there is a growing conviction that internal reforms will not prove sufficient, but that radical changes in the organization itself must be effected if far-reaching improvements are to result. Whatever may be the importance of the new arrangement as such, the most apparent and common change brought about by the junior high school has been in matters of organization and administration. In fact, the study of the junior high schools in the territory of the North Central Association of Colleges and Secondary Schools made by C. O. Davis of Ann Arbor leads him to conclude that "in scores of cases" the alleged reforms have consisted of a change of name and the introduction of a few alterations in the organization, rather than vital changes in purpose, studies, spirit, methods, and internal administration; he believes that fully one third of the 293 schools reported as junior high schools are a long way from really being such.

What are the new features in organization that are characteristic of a typical junior high school? Without doubt the departmental plan, which has already proved its advantages in many places, will prevail. The practice of the regular high school in promoting by subjects, rather than by grades, has now

generally been transferred to the existing junior high schools, lending greater flexibility and doing away with the rigid and frequently discouraging usage of the elementary schools. There must of necessity be a certain amount of classification and grouping; but the groups must not be rigid. As Dr. Johnston has said, "We must not allow the school to become a Procrustean bedstead." Children of this age sometimes differ fifteen inches in height, and there is no reason for thinking that they are any more alike in their social and mental traits.

The discipline of the school can easily and profitably be made transitional between the elementary and high schools; it must be adjusted to early adolescents, especially in the matter of giving greater freedom and imposing more responsibility.

It will not be found best to make the actual recitation for the younger pupils the full forty-five minutes common to high-school practice; shorter recitations with a greater number of subjects will broaden and give variety to the daily program of the younger pupils. This will not necessitate two kinds of recitation periods in the school and will occasion no administrative difficulty. When the teaching staff is sufficient, there can be uniform periods for all, with a provision for supervised study during part of the period. This will add to the flexibility of the organization, and make it convenient for the school to perform one of the important functions of the junior high school; namely, to teach pupils how to study.

When possible it is highly advantageous, although not fundamental, for a junior high school to have a separate building and especially a separate school life; this makes for convenience in meeting the individual needs of the pupils and providing the many activities outside the classroom which are so necessary in adapting the school life to the expanding natures of the pupils at this stage of development. There should be athletic teams, an orchestra, school colors, school yells, a literary society, and other things peculiar to the school; such features make school

life worth while and provide training in group activity. A separate school life is conducive to these extra-class activities.

The prerequisite for admission is another administrative aspect that has received considerable attention. It would seem that, if one of the chief reasons for a separate organization is that we may better adapt methods and subject-matter to pupils of nearly the same stage of development, then it would logically follow that a certain degree of physical and mental development, rather than a certain amount of subject-matter covered, should constitute the entrance requirement. This plan of admitting pupils would perhaps be more difficult to administer because less definite.

Recent studies of the situation show a great variety of usage in the grouping of grades; all of the following plans are found,—6-2-4, 6-6, 6-3-3, and 6-4-2, with the largest number in the North Central territory using the first plan. However, the tendency seems now to be strongly toward the 6-3-3 arrangement, and that, as has already been explained, for psychological reasons. The other ways of grouping are often made necessary by local conditions, particularly by the housing facilities. When the school population is too small to warrant a junior high school, the 6-6 plan can easily be adopted and the psychological advantages of the new idea secured. A decided majority of educational leaders, in keeping with the present tendencies in the junior-high-school movement, strongly favors some kind of arrangement which brings a change of method at the beginning of the seventh school year; this, it is pretty well agreed, is where secondary education should begin. This idea receives the support of the best European experience: in the English secondary schools, in the German gymnasium, and in the French lyceé the pupils begin their secondary-school work from two to four years earlier than in this country, and the school curriculums range from six to nine years. In none of these countries does the elementary school, as we understand the

term, extend beyond six years. Moreover, all the discussion and all the experiments have, as the California Committee on Readjustment affirms, tended toward breaking up "the traditional notion about the grouping of grades."

The junior high school is too new an institution to warrant students of education in making any safe generalizations concerning its effect on such matters as enrolment, elimination, and retardation. But from the studies that have been attempted the following guarded statements emerge: (1) the increased enrolment in the last six grades is due in part to the junior high school; (2) the percentage of pupils held in both the junior and senior high schools is somewhat greater than under the old arrangement; (3) the percentage of boys retained in both schools is greater under the new form of organization. It is believed, too, that the number of "repeaters" has been reduced.

An ever-present consideration with school boards and superintendents is the cost of maintenance. If the junior high school is to accomplish what its friends anticipate, it is reasonable to expect that the expense per capita will be about midway between the six-grade elementary school and the three-grade senior high school; for, although there will be needed much more equipment than is found in the old elementary school, it need not be so elaborate or expensive as that used in the high school, and the salaries of teachers are likely to be about midway between. Some of the extra expense will be due to the cost of industrial training, which has always been more expensive. If these suppositions are correct, it will probably figure out that the whole school budget is larger than it was under the old arrangement, although Professor Hanus and others have estimated that it would be less. But the matter of increased cost is only an initial difficulty; if it can be clearly demonstrated that the junior high school is more efficient as an educational device, the American people will gladly support

it, as another item in the gradual increase in the cost of education. But this way of figuring ignores the old waste of the pupil's time and energy. The most important consideration pertaining to this phase of the subject is that it will bring about a better distribution of the school funds; for, in nearly all school systems, there has been a disproportionate amount spent on the high school, notwithstanding the fact that only a small percentage of the children of the tax payers enter the high school and much fewer graduate. With the 6-3-3 plan, if the junior high school's share of the school budget is midway between the other two units of the system, the seventh and eighth grades (where the attendance is more nearly complete) will participate in the advantage resulting from more expensive equipment and higher salaried teachers. It will prove a natural device for pushing a portion of the school funds lower down in the grades. Thus the cost argument against the junior high school is not very convincing.

One of the most important administrative advantages will come from the possibility of better provision for the social and recreational activities of the pupils. Because of the more homogeneous school atmosphere and the social solidarity that results from grouping together pupils of the same stage of development, the extra-school activities can be better organized and more effectively supervised. The atmosphere of the well-regulated high school is greatly needed in early adolescence; as has been shown in Part I, the social instincts and impulses of boys and girls at this time are developing rapidly, hence an opportunity must be given for their exercise, and adequate provision made for their direction and training. In brief, the junior high school can better meet the social needs of the pupils. As Professor E. J. Swift has expressed it, "Enlarged, *sound* mentality is the result of life amid broad and sound social relations."

The critics of the junior high school have claimed that the

pupils will naturally lose the close personal touch of the grade teacher who is with them throughout the school day for a whole school year, and any loss of wholesome personal influence at this time of life is a rather serious matter. But, if a vigorous school spirit is developed and a wholesome social atmosphere created, the loss referred to will be much more than made up; for the pupils have now reached a stage in their social growth when they greatly desire to be one in spirit, and this social unity is a powerful influence, making for social efficiency and necessary to the training in loyalty that must not under any consideration be neglected at this time.

IX

A final word about buildings, equipment, and text-books. In many of the larger cities separate buildings are being provided for their junior high schools; this plan, as various writers have pointed out, facilitates administration and organization and it is likely to result in better provisions being made for shop and laboratory work. In the smaller cities it is not generally deemed necessary to provide a separate building. In many places the old high-school building is turned over to the new junior high school. When the senior high school has outgrown the old building, this is the most economical way of managing matters; and this adjustment furnishes a building well suited to the needs of the junior high school. A walk of at least a mile and a half to and from school is no disadvantage to boys and girls of this age; this will make it possible in most cities to assemble as many pupils as the ideal school of this type needs for administrative purposes.

In the matter of equipment, if the boys and girls are to be given "practical prevocational hints and vision of the great workaday world into which most of them are so soon to plunge," as F. M. Davenport phrases it, and if the presentation is to be made as concrete as has been urged in this chapter, their

must be suitable apparatus, tools, and materials, quite different from that found in the ordinary elementary school. In some cases the initial cost of this equipment will be considerable, the amount depending on what phases of the new movement are to receive emphasis; but it is a matter next in importance to providing well qualified teachers if the work is to make a strong appeal to the pupils and the community.

Lastly, there are probably at present only a few text-books well fitted to the needs of the pupils of junior-high-school age. But this, too, is only a temporary obstacle; text-book publishers very promptly began to announce new series of books for the junior high school with "new and invigorating ingredients." This is a difficulty, however, that should be gradually overcome; for, if the new texts are to be really adapted to the interests and needs of the pupils, they must be carefully worked out with the children in the schoolroom and by only the better qualified teachers; in this matter it will be best to "make haste slowly."

X

In this chapter the author has attempted to make clear the place and function, as he sees it, of this new unit of organization which is being rapidly developed within our educational system. If he has been successful, he has shown that the junior high school is being evolved for the purpose of trying to solve a long-standing and difficult problem, namely, to meet in a more vital manner the interests and the social and vocational demands of the boys and girls of early adolescence that have reached about the same stage of physical and mental development, to effect a more perfect articulation of all the parts of our educational system, to furnish instruction and training that are both fundamental and practical, cultural and broadly prevocational, to carry down into the elementary grades, again using

Davenport's words, "simple and important beginnings in that culture of science, of history, of art, of industry, of political and social experience, which help to make the mind of man free and useful in the modern world, a culture heretofore too narrowly reserved for the favored few in the higher schools and colleges and universities," to proceed on the assumption that, at this stage of the pupils' development, attitudes and capacities, initiative and personal resources are the important considerations, and to offer to all equal opportunities by providing the kind of training that the varying nature and social outlook of each demands, albeit, the differentiation does not result in any sorting process or is not made an opportunity for capital to exploit labor.

The fundamental ideas underlying this movement, as expressed by various educational leaders, seem to be (1) an "intimate and intensive study of the individualities of the pupils," (2) "continuous and uninterrupted opportunity for every pupil," (3) an earlier definite start for pupils intended for the professions and for those entering commercial and industrial callings, (4) "progressive differentiation" of subject-matter and methods in response to the changing personal needs and the demands of "our aspiring but somewhat chaotic American life," and (5) a scientific rather than a traditional grouping of the grades. We trust that the reader does not believe that our eight-year elementary school, which appears to be the result of ill-advised borrowing from the Prussian *folksschule*, is an institution fixed by the laws of nature, but that he does believe that the time is ripe for the working out in the interests of a more complete democracy of some such natural unit as is here described. At any rate, it is encouraging to know that many educational leaders have faith and are showing it by their works, although the results thus far are naturally somewhat chaotic because of lack of agreement as to aims and functions.

So far as this book is concerned, the consideration of the junior high school and all that the movement involves is confined to this chapter. The following chapters deal with problems connected with the regular four-year high school, the kind of a school in which a great majority of high-school principals and teachers will continue to serve for many years to come.

CHAPTER IX

THE AMERICAN HIGH-SCHOOL GROUP

The pupils of our high schools today form a very heterogeneous group; and, because of this fact, problems arise that did not exist seventy-five years ago. This is especially true in the high schools of our large cities. It is the purpose of this brief chapter to describe the nature of the high-school group and discuss some of the problems arising therefrom.

Until about the middle of the nineteenth century the boys and girls seeking a secondary education were largely from the families of the better classes, where English was the language spoken in the home, and the parents of nearly all were American born. A comparatively large number of the pupils who attended the early academies and high schools were preparing for something definite, many of them expecting to enter college or one of the professions; and we have learned from the studies of J. K. Van Denburg and others that a definite vocational motive acts as a favorable influence, both on the quality of the work done and on the length of time that the pupils remain in school, especially is the influence of definite expectations manifest in the case of those who have chosen careers requiring college or professional training. Thus the early high school and academy had a homogeneous enrolment, judged intellectually and socially, and the pupils were stimulated by the prospects of a definite and worthy calling and often by helpful family traditions.

The problems of the early secondary schools were simple, too, because of the modest social and industrial demands made by the communities which they served. The modern indus-

tries were in their infancy, and consequently the varied demands of modern society did not disturb and distract the thoughts of the worthy masters and pupils of those early days. The aims and functions of the secondary schools were not then seriously in question, because they were so simple and taken as a matter of course; and the modern discussions of educational values did not ring in the ears of the early curriculum maker. There was then no demand on the part of influential employers of labor that the high schools turn out narrowly trained workers, ready to become part of a great industrial machine. There was no opposition between the standards of the practical business man on the one hand and the individual and cultural demands on the other. In brief, peace and harmony prevailed both within and without the academic walls, consequently the problems were few and simple.

Dr. L. D. Coffman of the University of Minnesota has said that "the growth and improvement of the high school represents the most significant movement in American education in the last fifty years;" and, when we realize that this remarkable growth has resulted in this country having enrolled in its high schools a larger per cent of youths than any other country and a larger number of pupils than the rest of the world combined, we no longer expect to find in these schools a select group; for we know that the pupils must come from every economic and social stratum of the people; and the data that have already been collected fully support this inference. Van Denburg's studies of the schools of New York City indicate the utmost variety in the enrolment, as to race, social standing, and industrial station; and it is probable that a similar study of some of our other large cities would reveal a somewhat like condition; hence a few of Van Denburg's findings are here reported, as throwing light on the way the great influx of mixed pupils has tended to complicate the problems of the curriculum and of organization and management.

It was found that nearly every race in the city is sending pupils to the high schools. Of the twenty-three races represented, the Hebrews are sending more in proportion to their numbers than any of the others, the boys outnumbering the girls five to four. In point of numbers the pupils from the American homes rank second; from these homes the girls exceed the boys almost two to one. There can be no doubt that there is represented in this great racial mixture a corresponding variety of standards and ideals as to habits, conduct, and culture, and that the problem of unifying this cosmopolitan mass is consequently more difficult.

Van Denburg attempted to determine the economic status of the pupils from the rents paid for the homes and the occupations of the fathers. As might be expected, the extremes are very great; the lower extreme is surprisingly low, showing the extent to which the poorer classes appreciate the advantages of a high-school education, and the hold the American high school has gained on the imagination of the people. More than fifty per cent of the pupils came from homes that cost from ten to twenty dollars per month rental. This statement is significant to any one familiar with conditions and standards in New York City; it indicates that the standard of living in these homes is very low and that the parents are making a real sacrifice in order to send their children to high school. In proportion to the population, the city and federal employees contribute the largest number of pupils; but nearly half of the entire enrolment is made up of children of fathers classed as artisan-contractors, manufacturers, and tradesmen. A study of three cities in Iowa by Professor Irving King formerly of the State University shows a somewhat similar social distribution of the high-school pupils, judged by their father's occupations; the most interesting difference being that the professional classes in Iowa are patronizing the public high schools better than the same classes in New York City.

When the modern high-school group is questioned as to vocational expectations, the variety of occupations named by the pupils indicates a breadth of outlook full of significance for those responsible for the solution of high-school problems. In New York forty different callings are mentioned by the boys and twenty-one by the girls; a study of eleven hundred and nine pupils in three Iowa high schools shows an even greater range of occupations in the minds of the pupils. The wide vocational and social outlook revealed by the Van Denburg and King studies of the two localities, differing so much in character and so widely separated, points definitely to a curriculum problem, which will be discussed in the next chapter. This problem in its most modern phase is largely the result of the marvelous growth of the high schools since 1890, the increase from 1892 to 1921 being over 356 per cent; and there has been a parallel increase in the number and intricacy of the vocational demands.

But, according to the data submitted by Van Denburg, there is a more urgent high-school problem than the one growing out of the extremes indicated by the social status and the vocational preferences of the pupils, and that is the problem connected with the education of that portion of the high-school group which enters without any vocational expectations; it was found that these pupils do poorer work while in school and that they are much more likely to leave soon after entering. The problem originating from this portion of the high school is more urgent and much more difficult, for this gives rise to a *general* educational problem; whereas the extremes in social and vocational demands set a *specific* problem, and a problem that is now being attacked with much vigor in nearly all parts of the country.

There is another way in which the high-school pupils of the present vary greatly (although in early times the variation was even greater) and that is in their age of entering. For practical purposes it may be understood that the entering age

varies from twelve to seventeen, the medium being fourteen and nine-tenths in Iowa and fourteen and five-tenths in New York. A difference of five or more years in the age of the pupils creates problems of its own: the intellectual interests and the social instincts, as we have seen, are changing so rapidly at this time that comparatively small differences in age produce marked changes in the nature of the boy and girl; and the consequent variation in maturity tends to complicate the work of the high school. For this problem various solutions have been tried in the larger high schools, the most successful being the classification of pupils according to physiological, rather than chronological, age in part or all of their studies. Van Denburg reaches the conclusion that, "as far as age is concerned, thirteen is the ideal age for high-school entrance;" he bases this conclusion on the percentage of pupils of different entering ages that remain in high school till graduation.

The heterogeneous character of the high-school group already described suggests other differences, not so important, perhaps, from the standpoint of high-school management and method. We should expect to find represented in the large high schools of the country every possible religion (including non-religion) and every possible degree of general intelligence and culture. Fortunately religious differences no longer constitute a problem, unless it be in a few isolated cases where reading the Bible in the schools has made trouble. But all high-school teachers are continually made aware of the bearing of general intelligence, educational background, and culture upon the daily work of the pupil in nearly all subjects; the differences thus arising color all the efforts of the pupils and give to their work a different perspective in spite of the most skilful teaching; these are all very potent factors in the educative process, and they give rise to real teaching problems.

The foregoing paragraphs have attempted to show the extremely varied character of the modern high-school group, due

to social, economic, vocational, age, and cultural differences, with a view to making clear the lack of unity that naturally grows out of these differences. When we add the differences due to the causes and conditions just discussed to the extreme individual variations that we discovered in our study of adolescent nature (where abundance of life seems the only common characteristic), we realize more fully the scope and the inherent difficulties involved in high-school teaching, organization, and management.

Not only do these individual differences in the high-school group effect the problems of the curriculum, the organization, and methods of teaching, but they make it more difficult to maintain the principles and spirit of democracy, so necessary to the welfare of the pupils and the school. In the remaining chapters an effort is made to propose some of the means of solving the problems and overcoming the difficulties here outlined; but a few suggestions are here inserted concerning three ways that have been used with varying success in many high schools. The heterogeneous nature of the high-school group would seem to suggest that the problems involved fall into two classes: one, the meeting of the individual needs, which we have found so divergent; and the other, the harmonizing and bringing about within the group intellectual and social unity. The suggestions that follow pertain to the discovery and meeting of individual interests and needs; the other class of problems will be treated later.

1. Some kind of an advisory system is one of the most common devices for reaching the individual pupils in a large high school. In our study of adolescence we found that the friendship and sympathy of some adult with sense and judgment are greatly needed by both boys and girls in their teens; and the writer knows from the testimony of many high-school graduates how much the kindly interest and advice of teachers in whom the human element loomed large were appreciated,

and how much credit for success in school is awarded to such teachers. On entering a large high school many pupils find themselves swamped by the many new things and strange people that surround them; and, instead of being in a condition to think correctly and act wisely, when so much depends upon being able to do so, they are bewildered and embarrassed, and it is not surprising that they either fail or become discouraged. Thus there is no doubt that many pupils, especially during the first year in a large high school, very much need the personal attention of at least one teacher who is able quickly to establish a helpful relationship. This teacher must readily learn the pupil's nature and make him feel that he may come for advice whenever it is needed; the advice may be about books that are difficult to read and understand, the workings of some part of the school machinery (so often a mystery at first), the way to obtain membership in some pupil organization, or some purely personal matter. An advisory system is a scheme to restore the personal element that was lost when the small high school became large. If the school numbers about one hundred, there can be an advisor for each of the four classes. Experience has shown that it is not well to assign more than twenty or thirty pupils to a teacher if the work is to be done effectively; and that it is very pleasant and profitable for the same teacher to remain with the same group of pupils throughout their four years; the relationships often become close and the resulting friendships lasting. The successful teachers in this line of effort must have tact, judgment, a knowledge of adolescent nature, and a broad outlook on life. It is the personal element, the friendly acquaintance and interest, the sympathetic understanding that count and are more important than the helpful advice given. The author feels strongly that, in order to be most effective, the whole arrangement must be as informal and unofficial as possible, otherwise the advice may seem to be something that the taxpayers pay for, like the apparatus and

the teaching, and hence lacking the human touch and the element of spontaneity.

2. Another plan for establishing personal contact between the pupil and the teacher is an arrangement for conference hours; this is an effort to aid the pupils more directly in their school work, making possible the clearing up of lesson difficulties or the making up of work that has been missed. Some high schools have arranged for an hour a week in certain studies to be given over to informal discussions and helping with the work. It has been the author's observation that, when the right amount of work is expected of teachers and they are earnest and enthusiastic about their subjects and their pupils, it usually comes about that the necessary conferences are arranged without any general school regulation; like the advisory system just discussed, the conferences that result from the teacher's attitude and initiative are likely to be most appreciated and prove most helpful.

3. A still more formal way of rendering individual assistance to the pupils needing it is what has come to be known as supervised study. There have been very many and very encouraging reports concerning the successes of this plan. This scheme usually involves the lengthening of the school day for both pupils and teachers; in some cases this feature of the plan is highly desirable. Although something like supervised study is doubtless needed by the less mature pupils, it would seem that, like other similar devices for lessening personal responsibility and effort, it might easily be overdone, or in the hands of an unsympathetic teacher become very formal and perfunctory. The pupils must be given a chance to do solitary studying and they must be held responsible for the results of this independent work, otherwise one of the best elements in their school life will be lost. It is very important, however, that the pupils be given instruction in the art of studying; to learn how to study is really one of the best reasons for attending school.

We all know that the most necessary element in learning how to study is individual effort, the effort that tempers the will and develops the power of concentration; however, experience has proved that some help can be given by specific instruction concerning many points in the art of study, and high-school pupils are certainly entitled to all the help that can be given in this form. Two or three excellent small books on the most effective habits of study have recently been published.

In concluding this chapter on the nature of the American high-school group of today, it would seem well to remind the reader that this great variety of personalities, abilities, social standing, culture, and ideals furnishes the very best means for training almost any individual for social efficiency in a democracy. Hence the very conditions which make the successful organization and management of a large modern high school so difficult are the ideal conditions in which to build strong character and train for citizenship. In the public high school, composed as it is of representatives of every element of the community, the pupil finds life as nearly as possible like the life outside of the school, the life which he will soon have to live. It cannot be proved, but many are fully convinced that no select group, no matter on what basis the group is formed, provides the stimulating conditions found in the public high school; here we have a miniature world with all its strange and discordant elements, and adolescence is the time to learn how to deal with these elements, because at no other time are the human sympathies so broad and the necessary social adjustments so easily made.

CHAPTER X

THE CURRICULUM

I

The building of a high-school curriculum is a problem worthy the best efforts of any educator; it is a task that tests his pedagogical knowledge and his ability to think broadly and scientifically in the whole field of education. For several years the secondary school has been the storm center of educational discussion and criticism; and it has been upon the curriculum that the tempest has broken with much violence. The remarkable period of upheaval that we are passing through contrasts strikingly with the last quarter of the nineteenth century, when standards and values in matters educational were relatively settled, and the critics (whom we fortunately have always with us) were not, as now, questioning the standards and principles that had guided educational thinking for many generations. The famous report of the Committee of Ten assured us that a curriculum made up of high-school subjects that best fitted pupils to enter a classical college, the college authorities being the judges, furnishes the best possible education for the boys and girls who do not go to college, and this regardless of what occupations they may follow. This assurance came from the highest authorities of the land, it was based on the best thinking of that period, and nearly everybody felt at ease in Zion; for, is it not pleasant to have important matters settled authoritatively and be allowed to go on with one's work undisturbed by doubts and misgivings? Not so with the first quarter of the twentieth century; the fundamentals and values which have been trusted for centuries are now being

examined, and it is only the ultra conservatives who care much about what happens to these time-honored landmarks; nearly all are now in a mood to accept the findings of the venturesome educational experts, who are so ruthlessly testing all things. But in the meantime the curriculum maker is sorely perplexed; the fixed stars by which he was wont to sail with some degree of security are no longer *fixed*; and he must find his way by means of lights and bouys that are still shifting. To build a closely-knit, purposefully-constructed high-school curriculum of the most approved materials is to solve a most difficult and vital high-school problem.

As the last statement implies, this chapter will attempt to discuss only one type of curriculum making. It is assumed that the reader is not interested in that method of curriculum planning which Dr. C. H. Johnston once described as "clerical and manipulative," resulting in a curriculum on paper, made by a principal or superintendent with a sheet of paper before him neatly ruled with columns of oblong spaces into which he writes high-school subjects, selected from his program of studies with an eye to administrative convenience. Such checker-board curriculums often look well when printed in the annual catalog of the school; and the various labels placed at the top, such as "classical," "scientific," "college preparatory," "prevocational," and the like, serve as an advertisement and make the patrons think that their school is up-to-date and broad in its scope, reaching all classes of pupils. It is hoped that the following discussion will be at least suggestive to those who would build a real curriculum, genuinely "discriminating and educational," and showing "evidence of design in its construction." Success in this undertaking must be based on what Dr. Johnston has called "curriculum thinking;" and this kind of thinking implies a scientific attitude and a broad educational outlook.

The present-day curriculum maker must have the scientific attitude, because this is a time when the results which he will

obtain, if he follows the best thinking of his day, will differ very strikingly from those formerly accepted; that is, he must have the skill and the courage to follow the light wherever it may lead. He will be influenced only by the testing, experimenting, and thinking that are being done and not at all by tradition. Again, his outlook must be broad, for the changing curriculum is but a part of a great, world-wide movement. The outstanding characteristic of this age is continuous and rapid changes in standards, methods, and values, exemplified in the sciences, in statecraft, in military affairs, in agriculture, in the various industries, and in religion; in our thinking and in our practice we are embodying the Heraclitan doctrine of eternal flux.

No one who reads the educational literature of the day or listens to the bold discussion at any educational gathering doubts that we are in the midst of the greatest and most significant educational troubling of the waters that has occurred since the Renaissance; and this upheaval is manifested most definitely and concretely in the changes and the proposed changes in the curriculums of our secondary schools. The changes are not indicated merely by the offering of absolutely new subjects and the introduction of new material in the old subjects, but by the shifting of the interests and ideals of the pupils, made evident by the way in which they elect their courses; a glance at a graph showing the percentage of pupils enrolled throughout the United States in the various subjects old and new from 1900 to 1915 proves conclusively that something unusual and worthy of note has been happening during these fifteen years and especially during the last five years. Relatively the study of algebra, geometry, latin, physical geography, botany, zoölogy, and physiology has been falling off, in the case of some of these studies, very rapidly during the last five of the fifteen years; and the same graph shows a marvelous increase in the percentage of pupils studying

domestic economy, agriculture, general science, and modern languages. Is this shifting of the pupils' efforts due to a mere caprice and a liking for the newer studies, or is it due to a deep-seated conviction on the part of the pupils and parents that the time-honored subjects do not contain all that is vital, all that will best prepare them for "complete living," as Herbert Spencer long ago phrased it? The present chapter includes an attempt to answer this question. If we trust the signs of the times, the changes just noted may be taken as only a forecast of other changes as great and it would seem further-reaching in their effects that will soon be upon us.

All that has been said thus far suggests that there can be no such thing as an ideal curriculum, and, least of all, a general or type curriculum suited to the needs of all the different communities supporting high schools, schools with their student bodies as varied as was indicated in the last chapter. It would appear, also, from the preceding paragraphs that a curriculum cannot be expected, even from the combined wisdom of all the educational experts, that will satisfy the needs of any community for a very long period of time; this would imply social and industrial stagnation. But, besides the general social changes continually going on that must affect the curriculum, there are gradual modifications being wrought in the content of many of the subjects themselves, and, as we have seen, changes in the character of the pupils who attend the high schools. All of these changes must be continually reflected in the scientifically constructed curriculum. However, the actual modification of the high-school curriculum is likely to come about rather slowly; at least we are painfully aware that in the past schools have been extremely conservative and have lagged behind the social and economic development of their communities; school officials, it would appear, have not generally been very sensitive to the transformations going on in the world about them.

II

This suggests that it may be profitable to focus attention briefly on the qualifications requisite for the one who would undertake the professional task of planning a curriculum for a particular community.

1. The first and, from the standpoint of this book, most important qualification is a sympathetic knowledge of adolescent nature. This of course is an important prerequisite for every phase of secondary education, a qualification which no other wisdom or natural gift can replace. He who would select the educational pabulum for boys and girls from twelve to eighteen years of age must know their interests and needs, otherwise there will be malnutrition and stunted growth; and the needs of any organism are logically determined by the nature of that organism.

2. In the first chapter it was stated that there are two ways of determining matters pertaining to method and to the content of the curriculum; namely, by the nature of the educand and by the social outlook of the educand. Just now much stress is being placed on the latter; hence the next qualification demanded of the principal or superintendent as a curriculum maker is a thorough and first hand knowledge of the interests and needs of his community. If this is lacking, or if it is not reflected in his curriculum, any changes that he introduces are likely to be looked upon as passing fads or arbitrary inventions on his part; consequently he may fail to secure the coöperation of the people concerned. But there is a more important and deeper reason for requiring a knowledge of the community, and that is, the nature of the community or its social status determines in a majority of cases the social and industrial destinies of the pupils. The writer is fully aware that this is a dangerous and disputed doctrine. It is easily apparent that, if the ideals and industrial status of the community were thoroughly to dominate, the result might be the

narrowest and most provincial sort of a curriculum, qualities most undesirable, against which the new education proposes to wage unrelenting warfare; provincialism must be uprooted in the interests of a safe democracy. The discussion of this point will be resumed later. It would seem reasonable that any one who proposes important curriculum changes ought to have lived in his community for at least a year; without the close knowledge that comes from residence, serious mistakes are liable to be made. As an essential part of a knowledge of local conditions and needs, there should be perfect familiarity with the previous curriculums of the school and the way they have worked; from this source much light may often be thrown on the problem of the new curriculum; ordinary tact and common-sense dictate that the past cannot be entirely ignored, for all established things have some reason for being and they have friends who believe in their use.

3. The third qualification to be mentioned is a knowledge of the trend of educational thought in general and familiarity with the history of the high-school curriculum in particular. The reasons for insisting on this qualification are too obvious to need stating. It is only this kind of knowledge that gives educational perspective, an absolute requirement for curriculum thinking and one of the safeguards against serious pedagogical blundering.

4. The next qualification is more general and makes a higher demand, but is essential to the highest and most original curriculum thinking and planning; it calls for an appreciative understanding of the best thought of the age, a knowledge of "the general march of events," a consciousness of the spirit of the age. Without this qualification on the part of our curriculum makers, education will of necessity become an isolated affair, cut off from all vital connection with the world, which it is supposed to serve. As Dewey insists, "the modification going on in our method and curriculum of education is as much

a product of the changed social situation, and as much an effort to meet the needs of the new society that is forming, as are changes in modes of industry and commerce." Education is "part and parcel of the whole social evolution," and this fundamental fact must always be reflected in the changing curriculum; hence, the high demand on him who would essay the task under discussion.

5. No one can act wisely and safely for his school in planning its curriculum unless he is fully informed concerning the financial means at its disposal. This will determine somewhat definitely the number and nature of the courses that can be included in the program of studies: limited available funds necessarily limit the number of subjects that can be taught successfully; and limited funds restrain the introduction of courses requiring expensive equipment, effecting especially some of the newer subjects that require laboratory methods for their effective handling. This practical knowledge respecting available funds can usually be obtained with little trouble.

III

The careful student of secondary education that undertakes to construct a curriculum naturally hopes to be guided in his difficult task by the purpose, scope, and function of the high school, as conceived by the highest authorities of his day; but here he is confused and perplexed by the most diverse views and doctrines concerning all these. This disturbing diversity of opinion is readily explained: it grows out of the past history of the high school and the new demands by which the present school has been almost swamped. Secondary education has meant different things in different countries and to different ages; and this in turn is explained by the many divergencies in social life, to which the school has generally ministered as it has understood the demands of this life. Thus it is that we have in the high school of the present a conglomerate

of the various and frequently divergent ideas and practices of the past. Each step in the development of the high school has given rise to its problems, which have not always been wisely and completely solved, and these are included in the present complex situation. However, although nearly all the factors of the past are present and more or less operative, educational tradition in the form of oft-repeated dogma is fast losing its hold in theory and occasionally in practice; and this, too, is disturbing to some. Again, the urgent demand for universal secondary education has radically modified the purpose, scope, and function of the schools; the high school or academy that met the needs of the youths from the well-to-do, intellectual families and aided in preparing them for college or for a professional education could not be expected to measure up to the varying demands of the present, to state the case in the extreme. This is truly a transitional period, and the profound changes incident are exceedingly disconcerting.

Not only must the high schools of today appeal to the interests and meet the needs of their greatly increased and varied constituency, but they have assumed much added responsibility in the matter of social training, moral development, and physical efficiency, an enhanced responsibility due to changed scope and function. During the past fifty years, social, industrial, and economic arrangements and conditions have become extremely complex, consequently the needs of society have become extremely varied and exacting; and the schools are trying in many places to respond to new and difficult demands.

Thus the strangely mixed elements that have come down from the past, the greatly increased number of pupils with their immensely varied interests, needs, and abilities, and the complexity of modern methods and conditions have all contributed to the difficulty of determining the purpose, scope, and function of the American high school. Of one thing we are certain,

these can no longer be stated in terms of any single factor or force; and, because the purpose, scope, and function cannot be readily formulated, it is difficult to reach any feeling of security in building a high-school curriculum; hence the curriculum must continue to be a battleground.

IV

When a difficult piece of work is before one, it is the part of wisdom to analyze all the significant phenomena connected therewith. The first and most fruitful step to take in trying to understand any movement or change is to seek out the causes; this naturally aids in discovering the direction the movement is taking and the probable goal it will reach. Professor George H. Betts of Cornell College, Iowa, has adequately stated and discussed the causes. "As I understand the great underlying forces back of our changing curriculum, they are three in number: (1) The reaction from the disciplinary concept of education; (2) the pressure for new material seeking a place in the curriculum; and (3) the change from an individualistic and aristocratic to a social and democratic concept of education."

Professor Betts insists that "the disciplinary concept of education has broken down," an opinion to which nearly all the students of recent educational thought will readily assent; it is true many of the supposed disciplinary subjects still remain in our curriculums, but educators are trying to find other reasons for their retention. While James, Dewey, Thorndike, Bagley, Judd, and the rest were discussing the question pro and con and learnedly analyzing the results of the many tests and experiments that were in progress with a view to arriving at the truth in the matter, the pupils, parents, and teachers settled the case for themselves. "They have decreed that the theories devised by John Locke and his followers two centuries and more ago shall give way to points of view more in accord with modern ideals and demands." Professor Betts shows

that the public has spoken decisively in the matter by citing the disappearance of Greek from the curriculum of nearly all high schools, the rapid falling off in Latin (fifty-one to thirty-seven and a half per cent in fifteen years), the tendency to omit third semester algebra and solid geometry, and the modified college entrance requirements,—all changes due to a waning faith in the doctrine of formal discipline. This argument concerning the matter, which was made in December, 1916, now sounds a little out of date and seems almost unnecessary, so rapidly has the movement he discussed developed.

The second force mentioned by Professor Betts that tends to hasten the evolution that is transforming the high-school curriculum, "the pressure of new material," is by no means new, as the history of the high-school curriculum makes clear. For a century at least new subjects have been seeking a place; and as time has passed the enriching process has grown apace. At first the classics and mathematics furnished the bulk of material deemed necessary to prepare the pupils for the denominational colleges of early days; then the other subjects, which are now pretty thoroughly established, came in the following order,—(1) history and literature, (2) modern languages, (3) the sciences, first as text-book, afterwards as laboratory subjects, (4) manual training, domestic science and art, and commercial branches, (5) agriculture. The last two groups have taken their places very rapidly, due to their vocational appeal. The great wealth of material which has found its way into the program of studies has given rise to the problem of selecting that which is best suited to the needs of the individual pupils, and, in some cases, the problem of attempting to choose what seems best suited to the needs of the community.

The third force operating on the high-school curriculum, according to Professor Betts, is nothing less than an entirely new concept of education, naturally giving rise to a new definition of education; hence this is more fundamental than the

other two forces and really includes the others. The new definition of education has its origin in a deeper and broader understanding of democracy and has for its objective the demand for efficiency, which asks "that every person shall be equipped to render the fullest service to society, whatever his status or occupation." This *social* definition of education, which is gradually being formulated, as much by practice as through discussion and theorizing, is the great motor factor in our changing curriculum.

In general it may be said that these forces which cause the changes are being brought to bear on the curriculum makers through social pressure exerted by the pupils, their parents, and the thoughtful and progressive people of the community. The pupils wish and seek a direct attack on life and its problems: hence they are not eager to learn a dead language in order to get indirect aid in mastering their mother-tongue; hence they are impatient when asked to learn of a primitive civilization which furnishes some of the elements of the civilization by which they are surrounded and which can be had at first hand; hence they rebel against studying the records of the ancient peoples of the earth in order that they may better judge the present by the past when they are surrounded by more experiments in every line of human thought and action than they are able to follow, and they much prefer immediate experience. Moreover, the young people of the present generation often feel much confidence in their own judgment as to what knowledge and skill will best function in their lives. In all this the parents are usually behind them, and their influence is felt because they pay the bills. The progressive members of any community, with or without children, are likely to be influenced only slightly by educational tradition and carefully worked-out theories; their thinking is naturally stimulated and directed largely by the world in which they live and work, a world where the method of direct approach and efficiency,

as shown by actual results, prevails; and such members of a community usually find means of making their influence felt in matters which interest them. Thus the curriculum changes, and these are some of the causes which make it change.

After causes come results; and here, as elsewhere, we are naturally more concerned about what is going to happen than about what brought it to pass. The important and practical questions are, whither is all this disturbance of our educational equilibrium and the consequent readjustments tending? and, more important but much more difficult, will a point of vantage be finally reached when the drive has spent its force? Many of our educational experts are willing to point out and discuss the present trend of this rapid evolution, but he who would predict the end is, indeed, a man of courage or of reckless temerity. However, those who are charged with the responsibility of high-school curriculums cannot await the passing of the educational storm; they must read the signs as best they can and act, as in military matters, according to the latest reliable information. By so doing, we trust they will better serve their own communities and at the same time make a contribution in the form of real experience toward the solution of a most vital problem; it is a case where they do *not* serve "who only stand and wait." It is hoped that the remainder of the chapter, although not claiming much originality, will be constructively helpful to readers interested in the curriculum of the secondary school.

V

There are a few general principles, which seem to be fundamental, that have emerged from past discussion and experience. Whether these are held as imperative or not, they ought to be kept in mind; we cannot afford to break entirely with the past. Like all general principles, they are perhaps too general when concisely stated to have great direct practical value as aids toward decisions in concrete situations; if sound pedagogically,

they supply only a safe major premise, and it is always concerning the minor premise that a reliable judgment of someone is needed. The author is fully aware that the following statements are both incomplete and open to criticism.

1. "Equal opportunity for all" has ever been the fundamental concept of democracy; but this does not mean, in our problem, the same curriculum for all. In its practical workings nothing could be more undemocratic than to insist that all pupils pursue the same studies regardless of their needs and interests. It is a long-recognized principle in economics, that there is nothing less fair than the equal treatment of unequals. For both psychological and social reasons the principle holds in education. In Part I of this book much emphasis was placed on the fact that adolescents differ strikingly in their interests, tastes, and capacities; and the last chapter showed the extreme differences that actually exist in the social outlook of the various natural groups of high-school pupils. An earnest effort to recognize and meet in a practical way individual differences in interests and social needs gave rise to the elective system, first in colleges and afterwards in high schools. But this system in its extreme and unrestricted form seems to be a thing of the past in both higher and secondary education; the aim, it is believed, has been reached in safer and more scientific ways, as will appear later. However, the principle prevails that an equal opportunity for all demands a recognition of individual differences and a chance for individual choice of some kind.

2. The next principle in curriculum making is closely connected with the first and emphasizes one of the reasons for the first. In selecting and arranging the program of studies, the vastness and complexity of modern industrial and social organization must be duly recognized. The aim of this principle is "social efficiency," which, according to Dr. Bagley, should control the curriculum. The introduction of this principle into our curriculum planning has resulted in the establishment of our

numerous "vocational" and "industrial" courses, from which much is expected, especially by the patrons of the high schools; and there can be little doubt that these so-called practical subjects have come to stay. An investigation reported a few years ago by the late Dr. C. H. Johnston and covering "fifty-four high schools in towns of over 4000 population, representing practically every state in the union," showed that out of a total of ninety-three subjects offered by these schools fifty of them were vocational. If these schools were studied now, it is probable that a relatively larger number of vocational subjects would be found in their program of studies; for the "era of curriculum experimentation" has been pronounced, and there has been a strong vocational trend since this report was made. At any rate, the principle is so thoroughly established that such a thing as a high-school curriculum that completely ignores industrial and social demands is now practically inconceivable. It is difficult to imagine a principal or superintendent who has so entirely escaped the influence of his social and educational environment as to be able to *think* such a curriculum; there is no such thing as a real curriculum suspended in mid air. Another way of stating this principle is that the subjects offered by our high schools must be of such a character that they will function in the social life of the pupils after they leave school, using social in its broadest sense. This means very different curriculums for different individuals; for endless in variety are the callings that are awaiting them. Stating it this way makes it appear like an over-ambitious aim on the part of the schools, yet such are the modern demands as embodied in this principle of curriculum making.

3. Another recognized principle involves the same idea viewed from the standpoint of individual development. These are some of the forms of statement: the program of studies shall be broad enough to open up many opportunities; the high school shall be a place for testing and developing all kinds

of capacities and tastes; it shall not be possible that any talent may perish by default; the school shall render aid in the important work of self-discovery; speaking figuratively, the curriculum shall ring many rising-bells, some one of which will sound in the soul of every boy and girl. When thus formulated, this guiding principle sounds rather ideal and visionary; but no lower aim will harmonize with the modern social definition of education, which insists that the individual be so instructed and trained that he will render to society the most fruitful service of which he is by nature capable. This definition brings together the principle under discussion and the one preceding, and it emphasizes the doctrine that the individual can render his greatest service to society only when his natural talents have been discovered and fully developed.

The two foregoing principles, one demanding that high-school studies function in the social life of the pupil and the other that they function in his individual life, have given rise to a classification of high-school subjects as practical and cultural, or utilitarian and disciplinary; and the arguments defending the one or the other have during the past few years been many and vigorously shouted abroad, and the echoes have not entirely died away. But a higher philosophy of curriculum making prevails, which reconciles these two seemingly antagonistic parties by harmonizing their discordant views. This bringing together of the two divergent concepts of education has been accomplished by a redefining of the terms "culture" and "utility." The traditional idea of culture implies considerable familiarity with history and art, "the best that the world has known and said," according to Arnold, especially a knowledge of literature, including usually one at least of the ancient classical literatures; that is, culture has been synonymous with the possession of certain approved forms of knowledge, the emphasis being placed on the results of intellectual activity. Bagley feels that the term has been associated in

many minds with luxury and freedom from economic cares and responsibilities. At all events, culture has been a changing ideal, each age evolving its own conception of the term; hence our modern students of education who apply new standards of "culture" do no violence to the English language. Because a word has been subject to changes in meaning, it is not necessarily equivocal. Culture is still a good word to conjure with, but it is proposed to apply to it a new measure, one that is likely to be insisted upon more and more as the ideal of social efficiency and service obtains; it is to be some kind of a pragmatic test. The world in general, as well as a certain modern school of philosophers, is more inclined to measure all things by the way they work; applying this test to the matter under consideration, the degree of culture is determined, not by the amount or kind of knowledge, but by the *effect* produced on the life of the individual who has acquired the knowledge; culture should mean, not *having*, but *being*, and "by their fruits ye shall know them." This kind of culture, for one, may come from an appreciative reading of the classics; for another, it may come from an enthusiastic devotion to agriculture and all its allied sciences. Culture is an effect which may arise from countless different causes; but it in turn becomes a cause when embodied, and this embodied cause Dr. Bagley calls social efficiency. Utility, too, has taken on a new meaning, which is much broader than the old notion, that the useful in education is that which aids one in earning a living. Utility, like culture, must be judged by its far-reaching effects; the degree of utility must be determined, not alone by the dollars and cents earned, but by the use that is made of these; that is, by the amount of human satisfaction that results in the long run. Thus culture and utility are both measured by the legitimate human wants, both existence and cultural, that they aid in satisfying.

4. The next principle in curriculum making emanates from an idea that has developed concerning what makes for efficiency;

it may be stated in various ways. It is often known as "the principle of continuity of work," and implies the planning of the curriculum so that every pupil must on graduation know at least one subject well. The defences of this doctrine are too numerous and have been too often stated to need repetition here. The belief that an attempt to master one field of knowledge makes for efficiency has worked out in the high-school curriculum in the form of three- or four-year "majors," which provide coherence in subject-matter. These majors will be discussed later. There is now pretty thorough agreement, that **persistence** in one line of effort for a number of years is a genuinely *educative* process, as distinguished from mere getting of information, that the effect on the developing mental powers is accumulative, that it aids in establishing ideals and habits of thoroughness, which Bagley has proved may carry over into other fields of effort, and that it guards against forming the vicious habit of always picking and choosing. Perhaps the strongest reason for observing the principle which demands some prolonged and sustained effort on the part of the pupil is the fact that the elements in American life are now so numerous and varied, as compared with early days, and consequently so distracting, that some stabilizing influence is greatly needed to counteract the natural tendency to assume the touch-and-go attitude toward life and its occupations. It is now generally held that the Committee of Ten overemphasized the doctrine of the intensive treatment of a few subjects; however, it certainly is extremely desirable that our youth should learn what it means to do a thing well.

It may be well to add to the foregoing statement of principles a series of propositions, perhaps not best classified as fundamental principles, but rather as postulates based on certain psychological considerations. They are as follows: the program of studies shall be sufficiently rich and varied and the different curriculums shall be so arranged, that every pupil

will receive training that will assure motor skill; that he will form the habit of associating the symbol with the thing symbolized; that he will be given much opportunity to do real, independent thinking; and that he will acquire tastes and habits that will insure the enjoyment of his leisure time. It is believed that these aspects of the educative process are essential, whether we are thinking in terms of cultural or utilitarian values; they all function in both the social and individual life as it must be lived today. It is now generally believed that the degree of success reached in each of these forms of training depends, perhaps, more upon the teaching method employed than upon the curriculum content; but there is a pretty general agreement that certain subjects are especially rich in the possibility which they offer for specific kinds of training; and, although studies are no longer pursued merely for their training value, no group of human powers or fruitful habits must be allowed to fail by default.

VI

Let us now come to closer terms with the practical phases of our general topic, viewed from the standpoint of one who is actually engaged in arranging a program of studies for a particular school.

All who discuss or think about curriculum making are aware that it is fundamentally a problem dealing with values. Ever since the time that Herbert Spencer so logically discussed the question, "What Knowledge is of Most Worth?" the problem has been definitely before us. Although no one now defends his curriculum of science, we still go back to him to learn how subjects for the curriculum should be chosen and how they should be knit together. He does not furnish us an acceptable present-day curriculum, but he does give us a *method* whereby we may, if we are wise enough to apply it, build a curriculum. Spencer insists throughout his many argumentatively construc-

ted paragraphs on the doctrine of relative values, which for him meant that all subjects can be arranged in a kind of definite hierarchy. According to his way of reasoning, this fixes the value of each subject relative to all the others, giving each an absolutely fixed place in his scale, which is equivalent to assigning absolute values for each subject as measured by its effects upon students in general, thus ignoring the fundamental fact of individual variation. It is at once apparent to any one who is doing modern curriculum thinking, keeping in mind the varying psychological needs and social conditions, that an absolute value cannot be assigned to any subject. The values are relative. Curriculum making is, indeed, a question of evaluation, but the values are determined by the individual's interests and needs as an adolescent who will soon face the complex social demands of some community. These two factors which unite in fixing the value of a particular subject for a particular pupil do not operate like forces in mechanics, producing a simple resultant; but they interact on each other in such a subtle manner that the process defies analysis. The pressure of the pupil's social and economic environment is always present and making itself felt, but his natural inclinations and capacities determine in what manner he will respond to the pressure of his surroundings; and any school subject, including the method and spirit of the teaching, is a part of the pupil's environment. Thus, according to the modern concept of educational values, the worth of a course in stenography, Latin, animal husbandry, dietetics, or bench work cannot be ascertained by any Spencerian logic applied independent of some individual boy or girl; individual psychological needs and social outlook are factors which bid defiance to any scheme of generalization, for in both there is a personal element; and it is in this sense only that it is profitable to discuss the value of any school subject, and it is in this sense only that subjects have relative worth.

Since Spencer's day the curriculum has been an arena in which the educational philosophers have tried their mettle; but nothing seemed to get settled very authoritatively concerning educational values until we read in the remarkable report of the Committee of Ten that it does not matter so much *what* we study as *how* it is studied. Judged from the viewpoint of the present discussion, this comes nearer the truth, because the spirit and the method (which constitute the *how*) are determined somewhat at least by the interests and social needs of the learner. The Committee of Ten seems to assume that there is some ideal way, if it can be found, of teaching each subject that will give all the subjects in effect equal practical and cultural values. Like Spencer, the Committee overlooks the personal elements in the problem, represented by the interests and needs of the individual pupil.

The conclusion of the whole matter at present seems to be, that, because, as we learned in our study of adolescence, the interests and abilities of boys and girls in their teens differ so widely, and because the social and economic worlds make such varied requirements, due to the number and complexity of their elements, there is an urgent demand for a rich and varied program of studies; it is only by providing this that we can guard against talents going to waste. Another implication appears to be that our high-school curriculum must always, as we have found in another connection, continue to be a changing curriculum, because one of the factors which aids in fixing the worth of school studies, namely, the social factor, will continue to change. Hence we reach the double conclusion, a *rich* and a *changing* curriculum for our secondary schools.

But there must be some arrangement by means of which the individual pupil can select and appropriate to his own use the parts of this elaborate educational banquet that is spread out before him in the modern program of studies; to consume the whole menu would require in some cases seventeen or eighteen

years, and it is agreed that, with only a span-long life, the pupil should not spend over four years in getting this part of his nourishment. The selective devices have been many, and, like the list of subjects, the history of the devices shows some interesting changes and natural developments.

The early academies, whose very existence depended upon a large attendance secured through popular approval, found it necessary to offer a rather broad curriculum; but, as the function of the academies and early high schools came to be looked upon as pretty largely that of preparing their pupils for college, their curriculum in most cases narrowed down to one or two "courses of study." At first they were "Classical" and "English;" later they were "Classical" and "scientific," one of which all who graduated must take. These were pretty much the arbitrary inventions of pedagogs in and out of college. The extreme reaction from this narrow and strictly academic curriculum came in comparatively recent years when the "elective system" came into vogue, at first in the colleges and universities (President Eliot being the most famous and vigorous advocate) and later in many of the high schools. For twenty years educational literature was crowded with discussions of this system. This was a serious attempt to meet the varying individual interests and needs of all the pupils. Although this elective idea swept the country, the more conservative school officials ingeniously devised restrictions, so that in some instances the term "elective" was really a bluff. According to modern thought, the concept underlying the elective system was correct; yet the system in its extreme form is now pretty generally discredited, and both the colleges and high schools have forsaken it as an educational ideal which does not work. Educators are again assuming the responsibility which for a while was shifted by many schools to the pupils and parents. President Meiklejohn once said: "We let the student choose because we have no firm convictions ourselves of what he should

choose." But this statement no longer holds; we have now both convictions and courage.

Since experience has taught that it is better to modify the elective system by restricting the choice of subjects, various regulative schemes of a somewhat scientific nature have been devised. Instead of returning at once to some sort of a curriculum system, various plans for grouping high-school subjects according to their content have been worked out, the pupil's choice being regulated within these groups. One form is the "allied group," which, as defined by Dr. Johnston, is made up of "studies whose subject-matters are closely related, as for example two or more courses in physical science or biological science or agriculture." Another device is the "sequential group," which is made of "courses in a given high-school subject or closely allied high-school subjects which are planned for certain pupil groups who are to continue electing courses within this group through several different school years. These courses are so administered and taught that, because of the logical relationship, graded difficulty, and partial curriculum purpose, each course implies the next, credit for any in the group often being contingent upon completion of the group." In some schools the subjects offered are arranged in allied groups, and a certain number of units from each group are required for graduation, the pupils having the privilege of choosing among the various subjects of the group. The object of this arrangement is to compel the pupils to plan a balanced curriculum. Like the elective system, the group system makes it possible for each pupil to have his own combination of subjects, but with more or less definite limitations, usually made clear in connection with the printed program of studies. This grouping system has probably worked better than the free elective system. It naturally forces more thoughtfulness on the part of the pupils and parents in arranging the school work; it tends to bring about a more purposeful choice of studies; and it seeks to in-

introduce some order and reason into the pupils' curriculums from their first entrance, instead of the elective chaos which sometimes results from turning loose immature and irresponsible pupils, often without a purpose, to construct their own curriculums.

But, according to the reasoning and experience of the present writer, there is a surer and more directly helpful way of meeting the needs of high-school pupils than by means of either the elective or group system; and that is, by a "curriculum system," old fashioned as the name may sound. As used here, a curriculum is a systematic arrangement of subjects the completion of which leads to a diploma. In a four-year high school it generally represents a requirement of sixteen units. It is urged that each group of courses which constitutes a curriculum of the school be definitely planned to meet the vocational and social needs of a specific group of pupils. It is firmly believed that differentiated curriculums are demanded to serve most aptly the interests and needs of differentiated groups of pupils. The curriculum system is a deliberate attempt, as was the elective system, to recognize the individual difference in tastes and capacities and to aid the individual pupil to fit completely into his niche in the social structure for which he appears to be destined. This plan implies a serious attempt in each school to classify the social and vocational expectations of the pupils; if it were possible to do this successfully, then we should have a natural and scientific basis for grouping the pupils. This scheme assumes that there is no such thing as a *general* vocational education, but that definite needs must be met in a more or less definite manner. This assumption precludes the possibility of a curriculum, as the term is here used, being the result of the arbitrary invention of some principal or superintendent dexterous in the manipulation of checker-board schemes on paper.

Thus far it may appear that the social and vocational de-

mands of the time and the community are the main factors which justify the institution of differential curriculums; and it is doubtless true, as Professor Betts asserts, "that he who most nearly interprets the social demands placed upon education by the life of the present will come closest to finding the source of educational values;" but, as adolescent psychology teaches, youth is synonymous with rapidly widening social interests and relations, combined with a consequent growing feeling of approaching responsibility and a desire for a larger share in the world's activities. This means that there is, either active or latent, in the boy or girl of high-school age the psychic conditions favorable to the consideration of the various occupations and callings into which the world's work is classified. Hence it would seem to be the natural time to interest the pupil in vocational possibilities and requirements with a view to educational guidance. Moreover it turns out that even "the social demands placed upon education" can be met to the fullest degree only by giving to each pupil the instruction and training best suited to his interests and capacities, for only in this way will he be fitted to render his highest service to the world; and thus is harmonized individual and social needs.

The curriculum system, with its clearly differentiated groups of subjects, each looking toward a definite profession or calling, creates a real problem at the outset, which should be solved by the combined efforts of the pupil, parents, and school adviser. The psychological effect of being called upon to make an early decision concerning a four-year curriculum ought to be wholesome and stabilizing, as responsibility is generally sobering in its influence. Thus it would appear that the curriculum system is desirable for vocational, social, and psychological reasons, provided always that the system is so administered that the financial and social status of an immature youth shall not be allowed to determine his future.

How many curriculums shall there be? How shall they be

constructed, and of what material? What proportion of common elements shall they contain? These are questions calling for rather definite and concrete answers; one may reasonably expect the answers to be definite, but not always concrete, as conditions must always determine and conditions in this case cannot well be generalized.

The first question is sensibly answered by the general practice prevailing throughout the country in the schools where the system is in use. The number varies from one curriculum in the small, meagerly equipped high schools to forty or fifty rather distinct curriculums found in the large cosmopolitan high schools, with their adequate buildings, complete equipment, and corps of highly specialized teachers. A few years ago Los Angeles, Cal., had forty-two. Because the local demands are sometimes pressing, because school officials are ambitious for their school and anxious to be progressive, there has been a rather strong tendency for schools to undertake the administration of a larger number of curriculums than the teaching force of the schools or the resources of the communities warrant.

In answer to the second question, the best thought at present suggests that each curriculum be built up around a three- or four-year "major," which names and characterizes the curriculum. This major may be a single subject, like a foreign language or agriculture, or it may be a group of closely allied subjects, like the commercial branches, or it may be a logically knit sequential group, like a four-year sequence in mathematics. Whatever be the constitution of this dominating group of courses, its purpose is to meet, more or less directly, the vocational and social needs of a particular group of pupils, so far as these needs can be anticipated. The type curriculums which are described later illustrate the different kinds of majors and the idea of differentiated functions. It will be found in practice that these majors, with the exception of some of the foreign languages, are made up largely of the later additions to our

high-school program of studies; and they are built up from the courses that are felt by the pupils and the community to be immediately practical. They contain the materials in the curriculum whose worth is largely fixed by the relation of the individual to some part of his environment; consequently they furnish a part of the pupil's work which should require no artificial motivation. Referring to our statement of fundamental principles of curriculum making, the major provides the subject-matter for prolonged and sustained effort; it is that subject about which the pupil aims to "know everything." The major is justified by the social outlook of the group of pupils who choose it. But it also furnishes the most fruitful kind of discipline; because it naturally makes a strong appeal to the vital interests of the pupils, thus securing the enthusiasm necessary to an active and aggressive attitude toward the work; and because it tends to establish a relation between the pupils and their work most closely resembling conditions outside of school; and, as Spencer has pointed out, faculties are best developed through the performance of those functions and duties which the conditions of life require. The major subject is chosen for its content value, but the mental training is an exceedingly important accompaniment.

Every curriculum, it is conceded generally, should make ample provision for training in the oral and written use of the mother tongue and the development of taste for and appreciation of good modern literature, both prose and poetry; this is for both practical and cultural reasons, which have been too often stated to need repeating here. No part of education should result in more profit and pleasure than the work done in English. High schools throughout the country generally require from three to four years of this work; with the system here advocated the amount and nature of the work may well vary slightly, depending upon the purpose of the curriculum requiring it.

The arguments in favor of a three- or four-year major as the basis of each curriculum would seem to lead to the conclusion that it would be pedagogical to devote the four years of the pupil's time to the intensive study of four or five subjects; the influence of the Committee of Ten led in this direction. But this is proving too much. This plan would entirely exclude from the individual curriculum many important fields of knowledge of which the pupil must not remain ignorant. As Dean Leete of Carnegie Institute epigrammatically remarks, "You can't build an intensive knowledge of one thing upon the extensive ignorance of all things." It is pretty well agreed, both in theory and practice, that the intellectual needs of the pupil are more surely met by building up the remainder of the sixteen units, after the work in English and the major is provided for, out of comparatively short courses, most of them not to exceed a year. Someone has stated as an ideal, that one should know "everything about one thing and something about everything," and that the high-school curriculum should be planned with this need of the pupil in mind. The second half of this epigram suggests the short courses, often called "minors," of which we are speaking. This part of curriculum building is worthy the utmost care and wisdom. The purposes of these minors are manifold. Here should be found the subject-matter of which one cannot afford to be ignorant, "the priceless elements of the heritage of race experience," as Bagley expresses it; they include some courses common to all curriculums. However, many of them should be chosen and arranged in such a way as to buttress the work of the major study or group; as, for instance, chemistry in the domestic science curriculum, commercial arithmetic in connection with accounting, design in the manual training and domestic art curriculums, color and textiles in the domestic art curriculum, Roman history in the Latin curriculum, and so on. Among

these short courses, too, should be included the subjects demanded for "a liberal education" and for citizenship, such as pertain to common duties and responsibilities; these subjects are sometimes called "constants." They should represent nearly every field of human knowledge; and, because of their scope, they are well suited to test abilities along many lines, making a many sided appeal, and are broadly suggestive concerning the future work of the pupil, whether or not he enters higher institutions of learning. In brief, these minors provide the elements of a well-rounded mental equipment.

It would seem reasonable that one who has made some study of adolescent nature, who in general is familiar with the content of high-school subjects, who has given thought to the demands of social and economic life, and who is at least aware of the problems involved in modern curriculum planning, is more likely to construct a pedagogically arranged, closely knit, and definitely purposeful curriculum than an immature pupil thirteen or fourteen years of age who is just entering high school for the first time. The qualifications just mentioned are surely not unreasonable to expect of any principal or superintendent who would essay the task of making curriculums for his high school. Each differential curriculum should have a pretty definite vocational purpose, and be defensible on other grounds than tradition, custom, disciplinary value, character forming material, social worth, or any other vague and unproved claim. When all concerned unite in choosing one of the curriculums such as are here proposed, it would appear that we are justified in expecting that the pupil's educational welfare will be more surely secured than by shuffling isolated courses, especially if childish whims are allowed to influence the shuffling; this system automatically restrains the vicious manner of choosing which the elective system invites.

VIII

The following curriculums are submitted, not as ideals by any means, but as suggestive types, illustrative of the principles of curriculum making proposed in this chapter. What was said earlier in the chapter concerning the changing curriculum and the causes for its changing should make clear why these efforts at curriculum making will soon appear out of date. The reader will not expect to find these curriculums perfectly adapted to any particular school. The name of each will make clear its proposed vocational function. Each represents sixteen units of work.

1. In an agricultural curriculum, the major may well be composed of the following closely allied courses: domestic animals, animal feeding, crop production, soil physics, soil fertility, orchard and garden, plant and animal improvement, farm machinery, and farm management. Each subject can be covered in about a semester. The work in English composition and literature should be the same as in other curriculums. The short courses, or minors, are bench work, based on farm projects; mechanical drawing; cement construction; farm arithmetic, with the problems all based on data drawn from scientific farming; bookkeeping, applied to farm accounts; zoölogy, with the economic phases emphasized; physiology and hygiene; chemistry; physics; a year course in correlated algebra and geometry; commercial geography, industrial history, economics; United States history and civics. This curriculum is planned for boys who expect to take charge of a farm or enter an agricultural college.

2. The following allied courses, which naturally fall into two groups, are suggested as a major for a home economics curriculum: (a) food and cookery, meal planning and serving, household management, household accounts, food preservation, experimental cookery, dietetics, care and feeding of infants, home nursing and invalid cookery, institutional cookery, and

laundry; (b) plain sewing, dressmaking, millinery, and textiles. Each of the foregoing groups is equivalent to two units; nearly all the work requires double class periods. The remainder of the curriculum is made up of the usual work in English and the following minors: free-hand drawing, color, design, home decoration, costume design, elementary physical science, zoölogy, physiology and hygiene, botany, correlated mathematics, chemistry, physics, commercial geography, industrial history, economics, and United States history and civics. The course in physics should contain very little mathematics and much applied work. The chemistry should include a study of soap and soap making, sugar and sugar refining, baking powders and their use, dyeing, breakfast foods, milk, jellies, preserves, pickles, and candies. The major in this curriculum is made up of subjects which afford ample opportunities for training the eye and hand, and they can be made highly disciplinary. This is clearly a home-maker's curriculum for girls.

3. The commercial curriculum may include the following courses in its major: penmanship, business English, business methods, accounting (one year), shorthand, typewriting (each two years), and office training. The usual work in English should extend through the four years. The minors are the following: correlated mathematics; commercial arithmetic, taken at the same time as the accounting; elementary physical science; zoölogy; physiology and hygiene; botany; physics; commercial geography; industrial history; economics; commercial law; and United States history and civics. Double class periods are needed for accounting. This curriculum will probably enroll over thirty per cent of the pupils of the school. Its function is clearly differentiated: it aims to fit pupils directly for business life or prepare them for further work in university schools of commerce. This curriculum should be open to both boys and girls.

4. The field of manual training is so broad that it is difficult

to select the courses that should constitute the major in this curriculum; much depends upon the possible equipment of the school and the vocational outlook of the pupils. The following courses, all requiring double periods, are suggested: bench work, wood turning, furniture, pattern making, molding in soft metals, art metal, forging (when practical), bookbinding, pottery, mechanical drawing, machine drawing, and architectural drawing. The necessary work in English for this curriculum can be done in three years. The minors are as follows: algebra, plane geometry, mechanics arithmetic, book-keeping (short course), free-hand drawing, design, elementary physical science, zoölogy, physiology and hygiene, botany, physics, commercial geography, industrial history, economics, United States history and civics. This curriculum is fundamentally educational in its scope and content, and vocational in its methods; it looks somewhat definitely toward some of the mechanical callings; and, if a semester each of advanced algebra and solid geometry is included, it should prepare well for any of the various university curriculums in engineering.

5. The last type curriculum to be submitted corresponds somewhat closely to the old "college of art;" and, as matters now stand, it is recommended for pupils who expect to pursue a letters and science curriculum in college. The major is made up of work in one or two of the foreign languages as follows: Latin for two, three, or four years, including the authors usually read in high school and parts of Ovid; a modern language for at least two years, preferably French or Spanish, depending upon the vocational expectations of the pupil. The major may include from four to six years of foreign language work, depending on the number and combination of the courses; but the work in any one language should not be less than two years. At least ten units should be required from other subjects. The work in English may vary from three to four years. The minors are algebra, plane geometry, elementary physical

science, zoölogy, physiology and hygiene, botany, physics, ancient history, medieval and modern history, United States history and civics, economics, and free-hand drawing. Provision should be made for the substitution of advanced algebra and solid geometry when desired. The aim of this curriculum is not so directly vocational as that of the others. Although college requirements are now viewed as a species of impertinence, this curriculum looks toward college training or one of the professions. It is noticeably lacking in opportunities for hand and eye training, unless the sciences are made to contribute to this; but it is composed largely of subjects that have been fully organized, with methods of instruction completely developed.

In three of these curriculums correlated mathematics, completed in one year, takes the place of the traditional courses in algebra and plane geometry, the purpose being to save time for the courses with a more definite vocational outlook. It will be noted that certain sequential groups recur among the constants; for example, commercial geography, industrial history, and economics, providing an inductive approach to economic laws; zoölogy, and physiology and hygiene, the zoölogy furnishing a scientific basis for the practical aspects of the other subjects; and United States history and civics, which are best treated as a sequence. These sequential groups of minors are introduced for the purpose of making each curriculum a fabric as closely knit together as possible.

In addition to the work outlined above, it will be agreed that all pupils should be given a chance for training in music, public speaking, and gymnasium work. The training in vocal music should include both class and glee club work. The work in expression and public speaking should receive attention at least once a week. The work in physical education should be regular, the amount depending on conditions. When practical the course in physiology and hygiene, as well as the gymnasium work, should be given to the boys and girls separately.

It will be noted that the program of studies here suggested makes it possible easily to increase the number of curriculums by a more complete differentiation of the pupil-groups: the home economics naturally divides into domestic science and domestic art; the commercial, into accounting and stenography; the manual training, wood working and metal working; the foreign language curriculum, into as many curriculums as there are languages offered. Many of the newer subjects, such as printing and salesmanship, are not mentioned; but they may well be included when conditions favor. The greater the number of curriculums, the more definitely the school can meet the vocational needs of the pupils.

The reader, doubtless, is surprised at the amount of work in science that is required in all of the curriculums submitted. The author believes that Dr. C. W. Eliot is correct in maintaining that, "the most important part of education has always been the training of the senses through which the best part of knowledge comes." "If brain, eye, and hand are coöperating, the developing mental effect is increased; and the mental action and reaction is stronger still when eyes, ears, and hands, and the whole nervous system, the memory, and the discriminating judgment are at work together." It would seem that work in the sciences, when they are taught concretely and inductively, is one of the surest means that we have yet discovered for giving this all-important training in the correlation of eye, hand, and brain. Moreover, judging the sciences by the marvelous results that their application has produced during the past fifty years, one is constrained to believe that their pursuit must furnish both "fruitful knowledge" and "practical skill," and, if their pursuit develops in the pupils a scientific attitude, then we have fulfilled the third demand, namely, "right attitudes," which, according to Professor Betts, society is making upon the schools.

IX

There are a few points concerning the administration of such a curriculum system as is here described on which it is easy to agree. The system provides very definite combinations of courses and thus seems rather rigid, perhaps too much so in some cases to meet the unforeseen interests and needs of individual pupils; consequently the substitution of one subject for another should be allowed when there is a real reason for such a change. In planning the curriculums, it may, also, be considered advisable to add an element of flexibility to the system by arranging for a few alternates. It must be kept in mind, too, that the assignment of a pupil to a particular curriculum is not an act of infallibility, but at best merely a diagnosis and united judgment of the pupil and one or more adults; hence it should always be possible for a pupil to change from one curriculum to another without loss of credits when it is believed by all concerned that the real needs of the pupil will be better served by the change. There are other elements of flexibility that some administrators may see fit to introduce in the interest of individual differences. For strong pedagogical reasons, each subject should be held pretty definitely to its assigned year; that is, there should be little mixing of the pupils of different grades in the same class. Incidentally it may be noted that the curriculum system greatly facilitates the arranging of the daily program of classes, since it gives rise to a definite grouping of the entire school, the size of the groups corresponding to the number enrolled in the various curriculums.

Who should make the curriculum of the high school? A questionnaire covering the entire country would show that, with a very few exceptions, it is either the principal or the superintendent, working in his isolated wisdom, who determines both the content of the program of studies and the grouping of the courses in the various curriculums. Perhaps this part of our educational procedure, like many other aspects of our

school systems, is a remnant of the natural way of settling matters when the principal owned the school or academy. If our ideals of democracy are to be reflected in the management of our high schools, and if the professional intelligence of our many specifically trained teachers is to be capitalized, there must be faculty coöperation based on a measure of real responsibility on the part of all the members of the teaching force that are competent to interpret, criticize, and evaluate present-day educational procedure; and there are naturally in every carefully selected high-school faculty many teachers with thorough professional training and appreciative attitudes. If the viewpoint of these discussions is correct, the teachers who possess the most accurate and sympathetic knowledge of the nature and needs of adolescents and who are most fully aware of the wealth of educational material available will be most capable of coöperating when curriculum construction or revision is undertaken. Each teacher should know best the possibilities of the curriculum material in his own department, while the relation of the parts of the curriculum and the combinations and sequences of subjects are best determined by the faculty as a whole after much study and thorough discussion. No principal or superintendent who has in mind only the welfare of the pupils can forego the coöperative services of the teachers with their combined wealth of experience and knowledge. Furthermore, no argument is needed to convince the reader of the advantage of the coöperative over the proprietary method of dealing with curriculum problems as to its bearing on the attitude of the teachers toward the changes introduced.

An effort has been made to show that the various needs of the community, as well as the interests and aptitudes of the pupils, will be most effectively met by carefully planned differential curriculums based on the real activities of life rather than on predominant subjects. It is also maintained that the curriculum system permits a more homogeneous grouping of

the pupils, because the grouping is largely dominated by their vocational outlook; both the administrative and pedagogical advantages are readily apparent here. By making the primary and controlling purpose of each curriculum the training of the pupils who choose it for some rather definite place in their contemporary social economy it is believed there will result a more highly developed body of knowledge and a greater degree of skill, judged by the relation of this knowledge and skill to some occupation or calling. It is assumed that the disciplinary and cultural needs will be amply and effectively cared for while the vocational aims are being met; it is believed, also, that preparation for citizenship, building up of the inner resources, training for enjoyment, and development of a capacity for appreciation of the finer things of life can be made to parallel the vocationally controlled efforts of the school, and that it is very important to the welfare of the community and the pupil that these aims should not be divorced. Those phases of education which look to the personal and civic welfare of the pupil are extremely important; they provide for the integrating function of education; and this function of the high school is secured in the foregoing curriculums by a liberal number of carefully chosen constants, which should cover the fields and be organized and taught in the same way in all the curriculums. Moreover, the underlying theory of this chapter implies that much personal and cultural development comes as a most important by-product of the definitely directed vocational efforts of the pupils. This seems to be in conformity with fundamental principles of human economy, which demand, not that the individual be merely good, but that he be good for something; people that are definitely useful are, not only the most helpful members of society, but in general they enjoy the greatest measure of real personal satisfaction. Thus, while we train our pupils to make a living, we prepare them to make a life.

CHAPTER XI

SOCIAL ACTIVITIES

In this chapter we return to the study of the social nature and needs of high-school pupils. In Chapter VI emphasis was placed on the social aspects of adolescence, as a part of a complete account of the psychology of the period; in this chapter the emphasis will be laid on the means of meeting the social needs and supplying the important training which the rapidly unfolding social nature of adolescence demands. Without doubt the modern high-school curriculum, as discussed in the last chapter, attempts to appeal to the vast and varied interests of youth, including the social side of his nature; but it is especially through the extra-curricular activities of the high school that we are able to make the most direct and effective appeal to the social instincts and impulses, and consequently it is through these that we may minister most helpfully, as the following discussions attempt to indicate. Moreover, according to the modern conception of secondary education, the distinct line between formal education based on the curriculum and informal training secured through the properly organized and directed social activities is gradually to disappear, and some form of integrated education that will coördinate the experiences of the pupils is the aim of much recent educational effort; in this way the school will be made more like life.

As explained in the last chapter, all modern education is social education, using social in its broadest sense; it is a direct attempt on the part of the school to meet the needs of society; or, as Dr. Snedden expresses it, it is that "form of education the primary and controlling purpose of which is to affect group

activities in accordance with the demands of modern civilized society." "It is directed toward the formation of the habits, the development of appreciations, imparting of knowledge, and the formation of the ideals that underlie effective participation in group activities, such as those of the home, the state, and society generally." According to this modern concept of education, those forms which are called "physical education" and "cultural education" make only indirect, yet very important, contributions to the educative process. It will be helpful in the following discussions to keep in mind this modern notion of education; and no reader of Part I of this book will fail to recognize in the social activities of the secondary school the opportunity par excellent for all forms of social training.

Students of adolescence have always been impressed with the innate tendency of both boys and girls of this age to initiate some form of organization. It is interesting and significant the way the gang spirit of the preadolescent period gradually yet rapidly yields to a strong desire for organization. We need not go far to find the explanation of this familiar phenomenon: Hall has called it a "vicarious expression of the social instinct;" returning to the terminology used in our description of the earlier phases of the period, gregariousness is the underlying cause; it is one of the forms in which social gravitation manifests itself. Because of this adolescent tendency, organizations will be formed without the help of the faculty; this spontaneous type of organization, as Professor Scott suggests, "is not always fully conscious of itself, but it is none the less influential." Certain boys and girls are looked up to as leaders and around these some sort of an organized group will develop, so that a teacher is often unconsciously contending with one of these self-organized groups when he thinks he is dealing with an individual. It would appear that there is but one view to take of this organizing tendency of youth, and that is, to see in

it great possibilities for effective control, social training, and moral influence.

But such has not always been the attitude of high-school faculties toward pupil organizations. There are perhaps three distinct policies that have been pursued relative to them: (1) in some schools all the social activities of the pupils are dominated by the faculty, and there are no real organizations in the biological sense of the term; (2) sometimes the existence of pupil organizations is ignored with no attempt at control; (3) and there are schools in which the organizations and the faculty have learned to coöperate closely.

1. Where complete faculty control exists, one may expect lack of enthusiasm concerning social matters and perhaps a critical attitude toward whatever is, together with a sad dearth of opportunities to develop initiative and leadership. The only claim that can be made for complete faculty domination is that this policy requires less time and effort on the part of those responsible; this may be a claim but surely it is not an argument.

2. Where the social activities are ignored, it would seem that the only aim of the school is to develop and train the intellectual powers, assuming that human beings are pure intellect, or that the other phases of human nature will develop sufficiently and symmetrically without any attention from the school. One need not be surprised to find, under such conditions, that the athletic teams engage in practices that are decidedly harmful to the individual players and disgraceful to the school which they represent, and that fraternities and sororities, with all their attendant evils effecting both members and school, are flourishing. We may be certain that the social proclivities are ever present and will surely find some form of expression.

3. The policy of thorough coöperation in all the extra-curricular affairs, which are usually of a social nature, would seem to

call for no defense, since it now has the support of sound pedagogical principles and of much successful experience. If any defense is needed, it is hoped that sufficient will appear in the following statement of the functions of high-school social activities.

The function of such activities grows out of two demands; namely, the nature of the adolescent, already referred to, and the needs of the extremely social life for which he is preparing. The demands are supported by our knowledge of adolescent psychology and modern sociology; the former urges that opportunity be given for natural self-expression, and the latter suggests an attempt at complete social adjustment. Thus the function under consideration has two aspects: one subjective, involving all that can be known concerning the whole nature of youth; and the other objective, involving a thorough knowledge of modern society.

In our study of adolescence something was said concerning the secondary sex characters or manifestations and the importance to the welfare of the individual that these should be given adequate and safe channels through which to flow. When natural and wholesome means of expression for these secondary sex instincts are furnished, we are supplying the "long-circuitings" urged by Dr. Hall as necessary to individual safety; or, in the language of Freud, we provide a means of sublimating the sex impulses. Thus one of the important functions of high-school social activities is to establish safe and attractive avenues through which this subtle form of adolescent energy may find expression. In the "good old days," before the social forms of organization now common in the modern high school had found a place in our educational thinking and practice, the oft-recounted student pranks and the disgraceful outbreaks of mischief bordering on crime were among the ways that the unrestrained social impulses found vent. There is always danger of all sorts of social extremes, unless the social instincts

with **their** corresponding emotions are allowed expression in fitting social action.

As just stated, these social arrangements would seem to have a negative or safety-valve function; but we may be sure that their function is also positive in the fullest sense. During infancy, childhood, and preadolescence, the will has a long struggle, finding its way up through self-discovery and self-control to real comradeship; in early adolescence it is capable of personal loyalty, and in middle adolescence of self-reliance; finally in late adolescence must come, if at all, leadership, one of the will qualities of which the world has always been greatly in need. The only way to aid in the development of leaders is to furnish the opportunity for exercise and training in leadership; here, as elsewhere, one must learn to do by doing. As already intimated, leaders will appear whether or not there is a conscious effort at social organization; but these self-appointed, sometimes unconscious, leaders are not the constitutional leaders that are needed in a democracy, and one can never know in what direction they will lead. Hence social activities of all kinds are urgently demanded to serve as a training ground for safe leadership, the kind that will recognize natural and necessary limits, and that will function in accordance with the social will as expressed by the laws of society, instead of in accordance with self-will. It is only through the various forms of organization that the school most effectively brings to bear on the individual the maturing and sobering effect of socially-placed responsibility.

But all cannot be leaders. What does the school's organized efforts yield for those who follow? When the word organization is used carefully, it connotes life and growth; it suggests a working together of many parts toward a common purpose; it implies an interplay of forces, social in this case, each shaping the other while it is being shaped. In the democratic school organization there is valuable training in the give-and-take of

life, which cannot be acquired within the school so well in any other way; this tends to mitigate selfishness, and at the same time develop social power; in brief, it is a splendid place to learn to do "teamwork" and form the habit of coöperation, which it is hoped will carry over into community life. It furnishes a means of teaching first hand the relation of the individual to society and society to the individual; it may even give a foretaste of the ideals and joys of social service.

These are some of the ways in which social activities contribute to the social well-being of high-school pupils; but there are other results. As Dr. C. A. Perry of the Russell Sage Foundation has said, "intellectual growth is largely conditioned by the contact of the individual with other individuals. In the approbation of the group lies a powerful incentive in learning;" and there has yet been found no more effective means for making the individual know and feel the force of public opinion than the extra-class activities of the school, in which the pupil constantly submits to the judgment of the group and is thus stimulated or repressed as his action demands. In the coming together of the group the gregarious instincts are gratified, and in the approval of the group youthful love of approbation is appealed to.

Again, in these social activities, which most nearly simulate real life, there is provided a splendid opportunity for the exercise and development of loyalty, one of the most pervasive and the furthest-reaching of the virtues. When the enthusiastic youth identifies himself with the group of his own choice, he is no longer a mere individual, but a member of a debating club, an orchestra, a football team, or a play cast; and he must put forth his best effort in order that he may loyally serve the purpose of his organization. At no time in life is a human being so greatly influenced by loyalty as a motive; and it is only by the utmost devotion to the "cause" of the group that the individual can show his loyalty. It is interesting and encourag-

ing to note how some rather indolent, indifferent pupil, with seemingly little ability, will be roused to successful effort when the much coveted membership in some group has been attained; both his sense of pride and his natural loyalty are appealed to; he must "make good" for his team or his club. He gains in the kind of power represented by the purpose of his organization and incidentally learns loyalty by being loyal. The lesson in loyalty is the best that the school can give the pupil.

Because a human being is a real unit, an organic whole, physically, intellectually, socially, and morally, whatever affects the social aspects of his life favorably also affects all the other phases of his nature favorably, including especially the moral. In fact morality is simply knowing the will of the community in matters affecting the welfare of others, either directly or indirectly, and doing it; it is knowing and obeying the social-will. "The moral life is the response that the individual makes to the social order in which he lives." From this it follows that it is one of the functions of the social activities of the school to furnish this moral training which comes from all kinds of social contact. It would appear that the Baconian adage which affirms that character is perfected in solitude and talent in society is out of date; we have a new gospel which proclaims that character is perfected and strengthened by vigorous and frequent contact with the will of others; and this social impact is most effective when experienced in a group, all the members of which are striving for a common purpose. Not only is this the way character is built, but this is the means by which the individual comes to know his own character; he discovers himself only when he begins to feel the force of the social-will, when the dynamic force of his own social impulses meets and learns to unite and harmonize with corresponding impulses in others. It is only through vigorous social experiences that unsocial or purely individualistic tendencies can be overcome. The one who goes out into life with anything capricious or

freakish about him is doomed to many discouraging failures in spite of much native ability, discouraging because the socially inefficient never fully understand the cause of their repeated failures. The high-school dramatic club, debating society, and athletic team, each with its own style of strenuous criticism, coaching, and give-and-take, will aid greatly in removing the social kinks.

There is another important function of the social side of high-school life, important to the individual as affecting the integrity of his entire development and important for the school as making it a highly desirable place in which to *live* during the appointed time; this function is to give recreation and pleasure, and incidentally to teach ways of having wholesome recreation and pleasure and fix habits pertaining to these. It is a well established psychological fact that the keenest pleasure experienced by human beings is always in some way related to the activities of others; and the amount of enjoyment is likely to be in some sort of proportion to the degree of spontaneity which leads to this relation; thus social affinity, that strange subtile force, must be allowed some degree of freedom in order to do its work. Can any one who watches sympathetically and participates in the social activities mentioned later in this chapter doubt that the normal youth of high-school age gets the keenest kind of pleasure out of his part? It is, also, well known and fortunate that the things which give zest to life and make it seem worth living are the activities that are the most formative in their influences; they are sure to leave a "trace on the brain and nerve." Health of both mind and body depends on the proper functioning of the emotions, and here wholesome enjoyment easily ranks first in importance. Perhaps no one has seen more concrete proof of the relation between recreation and conduct than Jane Addams in her admirable work at Hull House; and she assures us "that amusement is stronger than vice, and that it alone can stifle the lust

for vice." Unfortunate, indeed, is the pupil who goes through high school without experiencing the joys and benefits of friendly association with his fellow pupils for some definite and worthy purpose; yet this is always liable to happen in the case of a certain retiring, self-conscious type of pupil.

Youth needs many forms of pleasant social coöperation, both for their character-shaping value and for their recreational value; but he needs them, also, that he may get firmly fixed, before it is too late, the habits of harmless enjoyment, one of the most valuable personal assets that he can take with him from his school life. J. P. Graber urges that "it is just as essential to a stable social order that the individual should know how to spend his recreational hours as it is that he should know how to spend his vocational hours."

If properly managed, social activities provide a safe channel for adolescent impulses, give skill in the interpretation of social situations, furnish training in leadership, help to form right attitudes and habits of coöperation, aid in developing the intellect, supply a motive for loyalty, create a moral atmosphere, and give real satisfaction and joy. It is because these are among their functions, as just explained, that many high-school principals are neither passively allowing voluntary, self-directed organizing to go on unheeded, nor arbitrarily insisting on faculty domination; but they are assuming the responsibility which adolescent nature and the social demands of the modern world suggest. In many high schools, where the modern viewpoint is held and the modern spirit prevails, much time and energy are devoted to devising means and methods for properly encouraging and controlling the social and organizing tendencies of the pupils, in some schools even credit toward graduation being given for proficiency in social leadership. However, it is only within the last few years that the possibilities for social training have come to be appreciated and the consequent obligation assumed. But, recent as is the movement, it is

an educational issue that must now be squarely faced; the composite social life and the spirit of the age must be reflected both in the curriculum and in the social activities of the pupils; both are tributaries to the broad stream of fruitful knowledge and inherited culture with which the modern high school enriches its community. The subjects of the curriculum are made to suggest methods of life rather than treated as distinct studies; and the various organizations of the school aim to embody and give expression to high ideals and noble resolves, furnishing a training, which, it is hoped, will become intuitive and aid when the stress and strains of life must be met.

If high-school authorities understand their responsibility in these matters and have accepted it, what methods are they employing in the discharge of their duties? When pupil organizations are initiated or modified, the traditions and work of the past are not to be ignored. Constructive effort begins with conditions as they are and proceeds gradually, the results of each step suggesting the next. No ready-made scheme is forced upon the pupils; here we are dealing with life, and cut-and-dried methods do not succeed. Even if the most ingenious adult plans could be made to work, they are not desirable; if forced upon the pupils, they kill initiative and tend to discourage and stunt originality. Hence the skilful faculty adviser keeps himself in the background, allows the officers (of which he is never one) and the committees to make decisions and sometimes learn by their mistakes; he works mostly by indirect and suggestive methods; he combines advice with constitutional liberty, the degree of freedom and the amount of advice varying by an inverse ratio as experience is gained and competency is manifested. It is only by this coöperative method that a social organization can work out and express the law of its own being, and unless it does this it is not a real organization but merely an aggregation of individuals without true social unity, which cannot be expected to

function in the ways already described. This means that the pupils must be in the game from the first, must be active and influential in framing the constitution and by-laws when these are needed, must create the pupil sentiment necessary to secure their approval and adoption, and must from time to time make their needs felt in shaping the policies of the organizations. Perhaps the most important duty of the faculty representative is to insist that membership in his organization stands for something really worth while; unless membership means some pretty tangible and definite advantage, respect for the organization and interest in its activities will soon be lost; and this part of the adviser's work also will be accomplished by indirect and suggestive methods. This will include frank and open constructive criticism, this being part of the training in give-and-take, which constitutes so much of life outside of the school. It is most wholesome when the opinions and criticisms of the adviser can be given on terms of equality and are entirely lacking in any imperative suggestion. Throughout his entire high-school experience the author has always been responsible for several organizations and has never explicitly retained the veto power; this policy he thoroughly believes in but does not urge it upon others, as conditions must determine. The pedagogy of the whole matter may be summed up as, *sympathetic coöperation* as nearly as possible on terms of *equality*.

It is a question how the faculty advisers are to be selected. Some high-school teachers are not well fitted by nature or training to enter understandingly and sympathetically into any of the social life of adolescents (should they retain their positions?), and some do not wish to do this extra outside work. Young people are much like certain of the lower animals; they instinctively know their friends when they meet them. In general it seems best to allow each class and organization to choose its own adviser, the principal guarding against too much being required of any one teacher. This method of choosing

may be supplemented in some cases by the principal's suggesting teachers that are known to be experts in the work needed. Thus even the choosing of an adviser may be managed coöperatively. It is usually found that the teachers who are naturally well qualified for this social work enjoy it; there are many returns from this form of service when well rendered.

The qualifications of the successful adviser are easily named: deep interest in young people and the things that appeal to them, tact, attractive personality, and usually some expert knowledge of the particular kind of activity to be managed; to these might be added the vision which sees in boys and girls the future efficient and agreeable members of the community. With such teachers in charge, pupils voluntarily and gladly come for help and advice, and control by the exercise of authority is not necessary. The teachers who are responsible for the various organizations and social activities of the school naturally constitute an unofficial cabinet of the principal, to keep him informed and counsel with him concerning the social progress and welfare of the school. Fortunate are the teachers chosen for this work; theirs is a delightful task; they will remain young in spirit by continually renewing their youth.

The number and kind of social activities and organizations will depend upon the size of the school, the teachers available for the work of guiding them, and somewhat upon the interests of the community. The following are the organizations that existed in a high school of about five hundred pupils, all of which were social in the wider sense: girls' literary society, with two women of the faculty chosen by the society as advisers, and holding bi-weekly meetings; boys' debating club, with a man in charge, and meeting every week; girls' glee club and boys' glee club, both in charge of the teacher of music, holding weekly rehearsals, and giving occasional public entertainments; orchestra, in charge of a skilled leader, having weekly practices, and furnishing music for all public school functions;

mandolin and guitar club (now considered out of fashion); boys' athletic association and athletic council, the latter composed of team captains, coaches, and principal; girls' athletic association and council, similar in organization to the boys' association; tennis association, members paying a small annual fee; publishing association, composed of editors, managers, and critic of the school paper; French club, in charge of the French teacher, holding monthly meetings, combining social and literary activities; science club, in charge of two science teachers chosen by the club, its purpose being to arrange for lectures on scientific subjects and give exhibitions of the science work of the school to the patrons; boys' chess club, which arranged chess tournaments; airplane club, in charge of the head of the manual training department, engaged in making gliders and holding contests with other schools; and four class organizations, giving dramatic and other public entertainments, and taking charge of social affairs, sometimes including dancing.

It will be noted that in a majority of cases the boys and girls were organized separately. This segregation came about naturally; the purposes and interests, being somewhat divergent, led to separate organizations. This is in keeping with the results of Dr. H. D. Sheldon's investigation, published in the *American Journal of Psychology*, which proved that boys and girls from ten to seventeen almost never spontaneously organize together. This is in harmony with what has already been said in an earlier chapter concerning the drawing apart of sexes during early adolescence. This tendency toward a separate organization does not preclude an occasional coming together by invitation, when one sex will put forth its best effort in the presence and for the entertainment of the other; these "open meetings" give what Dr. Hall calls "tonicity" to the work of both boys and girls. Further, teachers with experience know, as Dr. Sheldon indicates, that "girls are more

nearly governed by adult motives than boys," an important point to keep in mind when dealing with the two sexes.

As the names of these organizations suggest, all efforts along social lines in this school had in each case a very definite aim; there was no attempt to organize for purely social purposes or merely to have a good time. Thus the social activities were planned on the same principle as the high-school program of studies described in the preceding chapter; each aimed to accomplish a particular, concrete thing; the training in social efficiency and the wholesome enjoyment were very important by-products, just as culture and mental discipline are the incidental results of the differentiated vocational curriculums. Social efficiency and culture, like happiness, come most surely to those who engage whole-heartedly in some form of useful activity. Seek first some definite worthy purpose, "and all other things shall be added thereunto."

Teachers with experience are aware that difficult and delicate problems arise in connection with high-school social activities. Among these social dancing has come in for its share of trouble. It gives rise to one of those complex issues which many believe involve considerations affecting the physical, social, moral, and even religious welfare of both individuals and society. Dancing is preëminently an adolescent problem and involves nearly the whole psychology of youth. Nearly all students who have gone deeply into the nature of adolescence believe dancing to be one of the very best means of long-circuiting or sublimating the sex impulses, a safe way in which the secondary sex characters may find expression, as explained in Part I. This is the exact opposite of the opinion held by many who have not approached the subject from a scientific standpoint. Properly conducted dancing, with its musical accompaniment, is one of the most expressive languages of the emotions; and, as Hall says, tends to give "nervous poise and control," producing harmony between feeling and intellect, "inoculating good

states of mind and exorcising bad ones." On the physical side, it is an almost perfect means of coördinating the basal and smaller muscles, satisfies "the motor needs of youth," and is "one of the best expressions of pure play;" hence, to nearly all who dance there results much pleasure. There is the best possible training in the sense of rhythm; and "adolescence is the golden period of the nascency of rhythm." There naturally comes at this age a feeling for "the beauty of cadences." The present writer's experience with high-school dancing leads to the conclusion that it affords a splendid opportunity for pupils to learn some of the habits of refinement and many of the ordinary formalities of polite society. The pupils are always on their best behavior and are most courteous in the dance room. The properly managed high-school dance gives incidental training in democracy, for no pupil should refuse to dance with another. The following sentences from an editorial in *The Outlook* express the present author's views: "There is nothing essentially evil in rhythmic motion to the accompaniment of music. To banish dancing from assemblies under the control of Christian people is dangerous. To prohibit dancing altogether is to run counter to nature, and is generally futile. To regulate dancing under proper guidance is both safer and more practicable." It is worthy of note that social settlement workers have always found dancing very helpful in their work, proving both socially and morally beneficial. Like other attractive forms of exercise that harmonize the physical and mental powers, school dancing has great possibilities as a means of training in future habits of enjoyment. It would appear from the studies of C. H. Sears that thirteen or fourteen (a little later for boys) is the ideal age to learn to dance in order to get the greatest educational value and pleasure; at this time there usually arises a special interest in dancing, indicating that centers of rhythm and cadence are ripening.

Although dancing for pupils of high-school age is desirable

for all the reasons indicated, it is not urged indiscriminately on all responsible for the welfare of high-school pupils. Local conditions and especially local sentiment must determine what is best to do in the matter; a school cannot afford to run counter to the wishes of a large percentage of its patrons and thus lose their confidence and its influence.

If social dancing is part of the training given by the school, there are a few matters connected with it that must have the attention of some competent member of the faculty: if young people outside of the school are invited, the invitation list must be carefully censored; no questionable forms of dancing can be allowed; there must be approved chaperons; it is sometimes well to provide other forms of amusement for pupils who do not dance; an effort should be made to teach dancing to those who wish it; and, although it is difficult to bring about at an evening party, it is very desirable so to manage that all girls who wish may feel free to attend. To secure the greatest benefit for the school, many of the teachers must identify themselves with the dancing and encourage it with their presence; if they are able to join in the dancing, so much the better for them and their influence in the school, dancing with the pupils being one of many ways that they may prove they are human beings as well as teachers.

Amateur dramatics is another kind of social activity that brings much enjoyment and benefit, and, at the same time, gives rise to problems in high-school management. This form of pleasure can be made to connect more closely with the class work of the school. Like dancing, an opportunity for dramatic expression makes a strong appeal to adolescents; the youth naturally becomes dramatic, delights in assuming rôles and poses, and wishes to try all forms of expression, especially when personalities and emotions are involved. Few doubt the educational value of dramatic presentations. The poet Schiller says: "The stage is an institution combining amusement with

instruction, rest with exertion, where no faculty of the mind is overstrained, no pleasure enjoyed at the cost of the whole." Dramatic work is a form of refined enjoyment that connects readily and naturally with the study of literature. The author has seen a second year high-school class derive much pleasure from the dramatization and presentation of *A Tale of Two Cities*. Scenes from worthy plays can be presented with much satisfaction and profit by pupils of the lower classes, and the two upper classes can each gain much by giving one play during the school year. Corson hopes to see the time when oral impersonation will be the only examination in literature. Besides the intellectual discipline that comes from serious effort at dramatic interpretation, acting affords a splendid opportunity to develop control and poise in the presence of spectators, qualities naturally lacking, as we have seen, in early adolescence.

Planning and arranging the scenery and stage, and designing and making suitable costumes for a school play give opportunity for the coöperation of the art, manual training, and domestic art departments. Perhaps the most helpful function of high-school plays is the way they relate the social life of the school with the community; if the play presented is well chosen, the school and its patrons are brought together for relaxation and amusement on a high educational plane. Thus the pedagogy of adolescence demands that an opportunity be given for the exercise of the dramatic impulses, and the school play is a legitimate means of academic and social training; but, like the other social affairs of the school, it must from the first be in charge of a competent adult with tact and judgment, and, when possible, with some skill in dramatics. Taste must be shown in choosing a simple, unpretentious play, free from improper suggestiveness and coarseness; the more fun the play contains, the better; for high-school acting the humor of the play should depend mainly upon frequent amusing situations, rather than upon the subtle forms of humor. Much skill and tact

are needed in selecting the cast of characters. This can be done either by some competent teachers who know the temperaments of the candidates and their ability in oral expression, or by means of a "try-out" before the coach and a small committee familiar with the play chosen. For apparent reasons this is a matter that cannot well be left to the pupils. In doing the work connected with the presentation, advertising, and sale of tickets the services of as many pupils as possible should be enlisted; it gives a fine chance for training in business and in the habit of coöperation; and it is a sure way of securing general interest in the success of the undertaking.

When one takes into account the great variety of habits, tastes, attitudes, ideals, and temperaments represented by the pupils of a public high school, with their extreme differences in culture and social training, as described in a preceding chapter, the question naturally arises, is it possible or desirable to hold the membership of all high-school organizations open to every pupil in the school. Most certainly it is; the constitutional regulations concerning membership must be such that any pupil *uninvited* may seek admission. The conditions on which membership may be obtained will necessarily vary with the function of the organization and the qualifications required for successful work in the organization. The deciding authority will sometimes rest with the faculty expert or coach, as in the case of membership in a musical organization or the various athletic teams; sometimes it will rest with a majority vote of the members; and sometimes the mere paying of a nominal initiation fee will bring membership. But the way is always open to all who can qualify, otherwise we have present the chief evil of the fraternities and sororities, and the principle of democracy is violated. In general the high school is the last chance for the widely differentiated social groups to become integrated and to learn to work with each other for a common and worthy purpose; and the many social activities

and organizations of the modern high school supply the strongest integrating forces that have thus far been devised, because all participants are actuated by a common and real motive and are anxious for a common and real outcome.

The question also arises, shall credits be given for successful work in these extra-class activities. They require time and energy; they indicate real effort and skill and sometimes much ability in leadership; and they are admittedly the best index to future success; hence it is proposed in some quarters to allow certain credits toward graduation. This is wrong in principle, and there are surely many practical difficulties that will occur to any high-school administrator of experience. Much of the benefit and pleasure comes from the spontaneous and voluntary nature of the work. We should early learn that in many of the affairs of life it is the seemingly superfluous and unrewarded labor and the willingness to perform it that counts most. Emerson did not insist on the principle of compensation for the things of the spirit. In the social life and organizations of the school we have ready-at-hand many kinds of opportunity for the pupils to render willing and loyal service, the kind of service that wholesome youth delights in and for which it is highly important that we provide training.

Literary societies, debating, high-school journalism, athletics, and pupil finance will each be discussed in separate chapters. The social activities advocated in this and the following chapters will not aid greatly in producing the conscientious book-worm; but, if the ideas contained in the newer education are based on sound adolescent psychology, and if the scientific studies and careful observations thus far made are not misleading, the things here discussed will do much toward developing right social attitudes, habits of coöperation, ability for leadership, general social efficiency, and will aid greatly in establishing a real social democracy.

CHAPTER XII

LITERARY SOCIETIES

Adolescence is always seeking expression. Thoughts, emotions, and character are developing, that evermore publish themselves; happiness is dependent upon their finding suitable outflow. This is because adolescence is rich in content, and because it is social in its outlook. But, as has been pointed out in a former chapter, the power to appreciate naturally develops more rapidly than the power to express; and the multitudinous ingoing stimuli from all the vital and sense organs are extremely disturbing, and the speech centers are thereby thrown out of function. The difficulty is greatly enhanced in many cases by the high degree of self-consciousness that appears at this time and adds to the mental and emotional turmoil, making adequate expression for a time almost impossible; so youth naturally fails to "utter the thoughts that arise." Thus it would seem to follow that every possible avenue of expression should be kept open; recent studies by Thorndike and others have emphasized the law of individual variability; hence, if all are to have practice in expression, a great diversity of forms of expression must be provided. The extent to which this demand for many forms of expression is met constitutes one of the vital differences between the modern high school and the high school of the last century.

A glance at the table of contents shows that a chapter is devoted to each of several forms of expression,—such as, the many social activities, debating, journalism, athletic games, and general assembly programs; and others might easily be added. But experience has shown that it is not practical to

attempt to provide an organization for every separate form of expression desired; and provision can easily be made for a great variety of work in general literary societies, the number depending upon the size of the school. The following are some of the modes of expression that commonly find a place in the programs of a high-school literary society: —

1. A discussion of current topics is always profitable to the speaker, and, when well presented, interesting to a youthful audience; the interests of youth broaden very rapidly during the high-school years. The habit of studying current history will always be an asset, and nothing will stimulate the formation of this habit more surely than an opportunity to present the results of such study from a public platform. This phase of the society's work should be so managed as to encourage the forming of independent opinions on the part of the pupils, for this encourages independent thinking. Concerning the many public issues, there ought to be much honest difference of opinion, and each member must expect to defend his own. Sometimes this work on current events will take the form of reports on important public documents that all are not likely to read, such as, the president's messages, treaties, new laws of general interest, speeches by men in official positions, and state and national legislation that affects many people. If the greatest interest and most benefits are to be secured, the speaking on matters of current history should be largely extemporary.

2. Several times during the school year a literary society may well place on its program reviews of recent books of interest to people of high-school age. The task of reviewing a worthy book should usually be assigned to one of the older members. The aim of the reviewer should be to create in his hearers either a desire to read the book, or to give complete satisfaction with the knowledge conveyed through the review; either purpose may be gained by means of a clear account of

the contents, combined with the effective reading of portions of the text. A clear, fair, and interesting review of a good book is a rather difficult piece of literary work, calling for considerable reading experience and broad views.

3. Less ambitious but often more intensely interesting is an animated reproduction of a short story. The amount of material to be handled and the narrower range of interest lend themselves readily to a brief treatment. The interests of the society are usually best served when the program provides for the participation of several members; the reasons are too apparent to need stating. The short story with an excellent plot or the one that portrays an interesting character makes a strong appeal to all high-school pupils, while a story with an "atmosphere" fascinates some of the older members.

4. In nearly every high school there are a few pupils with real literary ability. The author has had the satisfaction of seeing some of these become contributors to our best magazines and writers of books listed among the best sellers. Such talent must not be allowed to perish by disuse. Pupils with taste and talent are always pleased to have an opportunity to cultivate their gifts and give the results of their efforts to their fellow-pupils. The literary society furnishes an appreciative audience, and the short story is a suitable vehicle by means of which young writers may express themselves. The stories that are well received may be given wider recognition in the school paper. It is true that the short story is an extremely difficult and delicate form of literature; but the qualities demanded make it all the more stimulating to an ambitious boy or girl with literary tastes.

5. The character sketch is another form of literary effort well fitted to the purposes of a literary program. This may vary in length from a single paragraph to a complete and fully developed essay; and there is no limit as to the people that may serve as subjects — pupils, members of the faculty, men

and women of the community, literary and historical figures. This form of composition is both profitable and interesting; and it stimulates close observation and vigorous thinking on the part of the writers. The name of the character portrayed may be withheld, skill in description being tested by the success with which those listening recognize the character described.

6. There are worth while accomplishments that may be cultivated in a literary society, such as, the reading aloud of poetry (especially by girls), the effective reciting from memory of choice bits of literature, and the rendering of worthy pieces of oratory by boys. If this kind of work is undertaken, some one must insist on naturalness of expression as the aim; no "elo-cution" should be tolerated. All kinds of music are acceptable and may well form part of every program, giving much satisfaction to both musicians and audience. Without doubt the form of expression that gives the greatest degree of pleasure is some kind of dramatics. Either short plays and farces or scenes from longer plays may be presented with much satisfaction; when the audience is confined to the members of the society, the play or scene may be put on with only a little coaching and simple costuming; screens will aid in extemporizing a stage. The more successful efforts will naturally find a place at general assembly.

7. Much pleasure and benefit may be had from dramatizing and presenting some of the stories studied in the literature classes. Parts of *Silas Marner* have proved well suited to this purpose. One group of high-school pupils found a market for their manuscript after they had given the play with considerable success. This and the work recommended in the preceding paragraph make a strong appeal to the dramatic instincts, which usually become very active during the high-school age.

8. If sufficient debating is not otherwise provided, this may be made a feature of an occasional program, the question al-

ways being one in which there is a live interest. For further discussion of this form of expression the reader is referred to the chapter on debating.

9. Literary societies, as well as the other organizations, furnish a splendid opportunity for training in parliamentary law, something that nearly everyone will need after leaving school. It has been found profitable occasionally to give part of the program time to a vigorous parliamentary drill; usually the drill is conducted by a member of the faculty who is skilful in such matters. The experience of the charter members of the society in framing a constitution and by-laws is interesting and helpful and affords at the outset a chance to learn parliamentary procedure. In this initial work the pupils need considerable help and guidance.

10. But all the forms of expression thus far mentioned are, in the opinion of the writer, unimportant when compared with that which should constitute the principal work of any literary society whose aims are practical. Judging from over twenty years' observation and experience, there is no extra-curricular activity more profitable to a high-school pupil than carefully organizing a speech on any subject of interest to the speaker and his audience, thinking it through a number of times, and delivering it in the most natural and effective manner possible. This form of training may be made an educational instrument of much potency; it provides vigorous exercise for the intellectual and emotional faculties; and it tends to establish effective habits of thought and speech. Vigorous extemporaneous speaking puts the speaker on his mettle as almost nothing else does; and it may be made to contribute much to his social and civic education.

One's success in nearly any walk of life depends more than is generally realized on clear and full communication, the only sure exception being the one who leads the life of a hermit. For most people learning to speak well is a slow and frequently

a discouraging process, especially to speak well before an audience; but there is hope for all possessed of ordinary mental endowments. In no field of effort is some degree of success more certain. "Whoever goes to his grave with bad English in his mouth," Professor G. H. Palmer asserts, "has no one to blame but himself for the disagreeable taste in his mouth." But it is highly important that the practice in public speaking should begin during the formative years of youth if the best results are to be obtained; this for many reasons, the most important of which is that effective extemporaneous speaking depends on the formation and fixing of certain complex habits, habits of reacting that involve many elements that must always be coördinated. This is equivalent to saying that there must be much vigorous and carefully watched practice, as in the case of any other art. The instinct of communication in youth is so strong that it is likely to serve as a powerful stimulus and give real zest to the practice whenever a suitable audience is provided.

We are wont to say, "no effective expression without clear and vigorous thinking," which is certainly true; but, thought and expression are so closely interrelated and react so definitely on each other, that we may well say, no clear and vigorous thinking without some form of clear and forceful expression. Thought kindles the fires of expression, but these in turn set up counter-currents which intensify and clarify the thinking. This is readily noted in the thinking of any one much practiced in vigorous extemporaneous speaking; the thoughts of a Burke grow and fulfil themselves as his periods proceed, so that every sentence and every paragraph spontaneously tends toward a natural climax; there is an unfolding due to the interaction of thought and expression; the relation is causal, but there is a continuous interchanging of cause and effect. The very act of expression sharpens the thinking and enriches the thought. Thus extemporaneous public speaking, which usually makes more

vigorous demands than any other form of expression, is justified on purely intellectual grounds and claims a place as an educational tool.

It is also worthy of note that perhaps no other kind of personal skill or power is more durable than the ability to give effective oral expression to one's thoughts. Instead of lessening this power, advancing years often give rise to a richer, fuller, and more discriminating style of speaking; many of the masterpieces of the world's oratory were spoken after three score and ten years had been reached. Youth, beauty, health, and often wealth fail; but the power of verbal expression is ours as long as the intellect lasts. All that is needed to call it forth is a suitable subject and a great occasion with an expectant audience. Youth must be given the opportunity and be encouraged to lay hold on the things that endure.

These appear to be some of the major reasons why a high school should, through its literary societies and in every other way, provide for much training and practice in platform speaking. But there are numerous by-products worthy of consideration, three of which may be mentioned: (1) the pupil that is frequently called upon to give public expression to his ideas and beliefs must be constantly in search of new information and consequently will accumulate stores of knowledge and opinions worth expressing; (2) no better means has yet been found of enlarging the effective vocabulary of the high-school boy or girl, and everyone who has listened to the speech of the average high-school pupil is aware of the urgent need of assistance in this matter; and (3) perhaps most important of all is the effect that successful oral expression has upon written expression, the power and skill in oral speech never failing to carry over into the written style. During the past fifteen years, teachers of English composition have become aware of this relation of the two forms of discourse, and they have almost unanimously turned to "oral themes" as the most effec-

tive means of giving tone and spontaneity to the written work of pupils; and all the recent experiments testing the effect of oral expression on written expression tend to prove the wisdom of this practice. Much training in oral English has been found a sure cure for bookish English; and oral expression naturally stresses the content rather than the form, an important consideration in all kinds of expression. The findings of English teachers in this matter agree with the teachings of literary history; Palmer reminds us that book times have been decadent times, while talking times have been glorious.

The first consideration relative to the work here urged is the choice of subjects upon which to speak. Recent discussions and practice seem to stress content rather than form in all lines of high-school English; and this is especially important as applied to extemporaneous speaking. Nearly everybody naturally speaks with enthusiasm and consequently with animation on any topic that is of vital interest to him. Judging from the list of subjects for "essays" found in the older books on rhetoric, this never seems to have occurred to the authors; or, if they were conscious of this principle, they were ignorant concerning the real interests of boys and girls of high-school age. The subjects suggested were usually literary or such as an adult with considerable life experience might enjoy discussing. In general it may be taken for granted that almost any topic with real human interest will stimulate the young speaker, provided it is not too difficult for him to master thoroughly. Whenever possible, the inexperienced speaker should choose a theme relative to something within his own personal experience or observation. The effect of first-hand contact with any matter under discussion is always evident in public speakers; their words have a truer ring, their thoughts naturally fall into a more effective order, and the voice comes forth with tones that are reassuring and convincing. Emerson once said:

"I learn immediately from any speaker how much he has lived, through the poverty or splendor of his speech;" and again, "Life is our dictionary." "Only so much do I know, as I have lived." The young speaker cannot well forego the advantage in point of manner and expression that comes from first-hand knowledge and experience, for so much depends in the mastery of any art on a correct beginning. In this case it is all important at first that there be spontaneity, suitable emotional tone, and a feeling of satisfaction. Hence the precept for the young speaker, speak concerning those things of which you know personally. The speaker's personal knowledge should of course be enriched by reading and conversation; for there should be no limit to his sources of information, provided proper credit is given and provided the language and organization are original.

The following rather loose classification of topics suitable for high-school pupils is only intended to be suggestive; an attempt is made to arrange the topics according to the probable interest of the younger speakers. (1) School affairs and activities. If the school is making the proper appeal to its pupils, this group of subjects clearly stands first in interest; and it has the advantage of being always new, for both the school activities and the pupil-group are ever changing. When the society programs draw liberally from this class of topics, there are at least two very important by-products. (a) The discussions are likely to be very illuminating to those in authority provided they have ears; and (b) a natural means is furnished for shaping and crystallizing school sentiment on many matters vital to the welfare of the school. As Bagley says, "ideas must be emotionalized to serve as conduct controls," and public speaking is a natural means to the desired end, because based on a fundamental instinct and sure to engender "emotional force." (2) Social life. As we have seen repeatedly, all forms of social life are making a strong appeal at this time, and topics drawn from this source are naturally of deep interest to high-

school pupils and hence stimulating as subjects for public discussion. Emerson assures us that, "we have social strength. Our affections to others create a sort of vantage or purchase which nothing else will supply." When a social subject is chosen and we provide an audience situation, we take advantage of the strong adolescent social instincts; and the youth may be able to say to others what he could not first say to himself. This class of subjects is very large. (3) Leisure. Because of the pleasant associations, topics furnished from the leisure part of one's life are agreeable and interesting, and they tend to stimulate enthusiasm on the part of a speaker. They have a gratifying emotional setting, namely, enjoyment. The discussion of topics of this kind can readily be made to contribute to the esthetic education of pupils and to stimulate the formation of habits of harmless enjoyment. (4) Vocational subjects. Young people of high-school age, especially boys, are beginning to think of the different callings with reference to their own likes, dislikes, and natural aptitudes; because of broadening interests and budding altruism, they are thinking more than ever before about the world's work. The ready interest in this matter has been clearly apparent in the many attempts during recent years to give high-school pupils aid in choosing a vocation. Determining their life work becomes with some of the pupils an affair of serious moment; what they have to say on such a subject is consequently carefully thought out and is likely to be genuine and natural. (5) Subjects of general public interest. The talk that high-school pupils hear concerning current events begins to make a new appeal, consequently they are easily interested in the daily newspapers and the standard magazines, in which current history is recorded. Topics drawn from this source furnish very profitable subjects for extemporaneous speaking; and the range of subject matter is so wide that the interests of all can be met. Perhaps recent inventions and discoveries furnish the most engrossing

subjects for a certain type of boy. Pupils often tend to specialize on one line of inventions or discoveries and enjoy giving a series of speeches; flying machines furnished one boy with subjects for his part of the programs of his literary society during a whole year (he had made a complete biplane, except the engine); another gave many speeches on the latest inventions pertaining to automobiles; both always spoke with enthusiasm and animation and never used notes. (6) School subjects. Some of the high-school subjects are now so rich in content that they supply a limitless source from which to draw. This is especially true of science, history, biography, agriculture, and manual training. This group of subjects is placed last because they do not generally make as strong an appeal to high-school pupils as do the everyday matters suggested first. The degree of interest in this class of subjects depends largely on the personality of the teachers and the manner of attacking the subjects. As we should expect, the use of topics from the school subjects always reacts favorably on the regular work of the classroom.

The choice of such subjects as are here suggested tends to prevent all attempts at old-fashioned oratory. These topics do not lend themselves to the dignified, formal orations with which the ambitious youths of the old academies were wont to regale their teachers and admiring parents and friends; those stilted and flowery efforts of the early time, whose only effect seems to have been to inculcate artificiality and set up false standards, do not flourish in an atmosphere of concrete, practical, human, everyday affairs. Among these less ambitious topics can always be found material within the ability of the high-school pupil. His speeches need not lack real content; he tends to express himself naturally and interestingly concerning those things of which he knows; and it is only in this way that there can be ingrained right habits of thinking and speaking. At all times the individual should, as far as possible,

live his own life and speak his own thoughts; and, that public speeches may be formative in their influence, they must concern those things which really touch the lives of the speakers. Public speech naturally generates that emotional warmth which tends to make ideas formative. But the youthful speaker must be aided in making both his life and his thoughts worthy; and skilful adult guidance in extemporaneous speaking will contribute to this end.

When pupils have learned to confine their efforts to subjects that really interest them and are within their ability, many of the discouraging difficulties are forestalled. As in other arts, the greatest care is needed during the initial stages of the learning process. However, there are certain natural dangers growing out of an extreme ambition on the part of either the young speaker or his critic to make sure of a correct beginning. As Professor G. H. Palmer has pointed out, "There is something enervating in conscious care. Necessary as it is in shaping our purposes, if allowed too direct and exclusive control, consciousness breeds hesitation and feebleness. Action is not excellent, at least, until spontaneous." Neither learner nor teacher must expect, or even seek, absolute correctness in either delivery or linguistic form. There are such things in public as well as in private speech as wholesome blunders when these protect us against the patience-trying, tedious, studied picking-and-choosing of every word and phrase that suggests the pedant. No one is persuasive or greatly moving who is consciously fastidious and fussy about his language or his pronunciation. Oral speech to be effective must have a certain daring and dash about it. The critic can aid the beginner in this matter by stressing the content rather than the form, by creating as far as possible a real problem or issue, and by helping the learner to keep in mind the viewpoint of his audience. The youth who has his eye on his subject and is determined at any cost to carry his point with his hearers naturally warms to his

task and is not in great danger of being overnice touching matters of mere form and voice.

But this giving of the reins to the young speaker, as here advocated, does not mean that we are to allow him to form awkward or distracting habits of speech or delivery, nor that we should shut our eyes to his mannerisms, which are sure to accompany him through life unless some one is kind enough persistently to point them out. Few are aware of their own bad habits of speech, and no one is conscious of his own mannerisms; some one must assist, and the earlier the help comes, the more effective it will be. Some of the most common mannerisms and awkward habits to make their appearance are the following: a variety of meaningless sounds (usually vowel sounds) with which speakers fill the pauses between their sentences, resting the weight continually on one foot, leaning on some object that happens to be at hand, placing the hands in all sorts of unnatural positions, a restless movement of the eyes, peculiar tricks of inflection, fussing with one's notes or other objects. These tricks and habits are largely due to self-consciousness at the beginning, but, if not broken up, they quickly become fixed and will interfere with success. Perhaps the most annoying and at the same time most persistent is the one first mentioned. It is surprising how many people in both private and public mar their otherwise effective speaking by the introduction of noises (often unpleasant in themselves) between their sentences and phrases. The young speaker must be taught to keep still while he frames his next thought; it is a case where "silence is golden." A real pause may give the effect of thoughtfulness and deliberation and thus aid in securing close attention, whereas the empty sounds suggest lack of preparation and concentration. This is a habit or mannerism that frequently calls for vigorous treatment to knock it out of the young speaker. The other disturbing tricks and habits usually disappear when the speaker's atten-

tion is called to them and his initial embarrassment has been overcome by practice.

All this emphasizes the thought that there must be much practice under immediate supervision. Many recent experimental investigations into the best ways of acquiring skill in almost any line support this principle. In the author's opinion, the criticism both favorable and adverse is most profitable when given in the presence of the whole society. If ordinary tact is used in emphasizing as many good qualities as possible, the members will not object to a frank and sincere pointing out of their faults, especially when this has become an understood "order of the day." All good athletic coaches practice the open form of criticism.

Next in importance to having something worth while to say comes organization of ideas. In this part of the preparation all beginners need help at times. An outline or "brief" is an almost indispensable mechanical aid to clear and logical thinking. If the work of the literary society includes extemporary speaking, as here urged, some one should give at least a little instruction in putting the points of a speech in tabular form; this part of the work should not stop with a mere list of the topics to be treated, but should include the arranging of all ideas to be used as topics and subtopics; that is, the written organization should be completely logical, exhibiting the main points and the degree of relevancy of the subpoints. This greatly aids close and logical thinking, which in turn tends to produce an effective and cogent delivery. The brief or notes should always be prepared but not much in evidence during the speech. Young speakers may be allowed to use notes but not to lean on them heavily; and they should look forward to the time when they are able to go confidently to the platform without their carefully prepared written organization. This stage in their development is reached after considerable experience, and it means that the speech must be thought

through many times. This does not imply framing and memorizing all the sentences; the ability to write, memorize, and deliver a speech has its use, but the occasions for extemporaneous speaking are much more numerous, and, from the standpoint of utility in dealing with real issues, much more important.

It will be noted that nothing equivalent to a complete course in public speaking is proposed. The training in extemporaneous speaking here suggested as the chief work of a high-school literary society can be supervised by any well-educated teacher who is interested in effective oral speaking and in the welfare of high-school pupils. In the foregoing modest plan it has simply been urged that the speakers be encouraged to select as their subjects something concrete concerning which they have real interest and feel that they can interest their audience, that they make a vigorous effort to arrange their ideas in a logical and effective order, that they subordinate their personal interests to those of their hearers by always having the viewpoint of their audience in mind, that they eliminate as rapidly as possible all mannerisms and awkward habits of position and delivery, that they cultivate a clear, persuasive, and animated manner of speaking, and that they have at all times the benefit of frank, sympathetic, tactful criticism.

If a literary society is to be helpful in any large way to its members, the number must be limited, for the benefit derived is clearly dependent upon the amount of actual practice that each member is able to get. The membership should not exceed twenty-five or thirty; the author's experience is favorable to even a smaller maximum. The larger the membership, the less individual responsibility and the smaller amount of time for each member on the platform. The constitution, by-laws, and organization should be very simple. The business part of the meetings should generally be brief. Other interests should not be allowed to interfere with the regular meeting. Group consciousness, which is necessary to the highest efficiency

of any organization, can sometimes be intensified by an occasional event of a purely social nature, such as, a party, a hike, a breakfast together in the country, or a marshmallow roast. Although the purpose is the cultivation of skill in written and oral expression, the vitality and success of a literary organization of any kind will depend more than we are likely to realize on the degree of social spirit which permeates all its activities; the reasons for this fact have frequently appeared in the earlier chapters.

CHAPTER XIII

DEBATING

I

In our study of the physical changes which form the basis of adolescence, we found that the brain increases rapidly in complexity. Many collateral neurons develop, the extending fiber processes ramifying the central nervous system; seemingly new cells and brain tracts become active; especially do the higher associative areas of the cortex exhibit new energy. Consequent upon this structural development, we found new thought functions appearing: a desire and capacity for independent thinking, a critical attitude toward things and ideas that had always been taken for granted, an increasing ability to deal with larger and more complex ranges of thought, a growing enjoyment in the use of the reasoning powers, and an increasing interest in the organization of ideas.

However, in the early adolescent period we found that the power to think and understand outstrips the ability to express and explain. This lagging behind of the power of expression, especially in the boy, gives rise to embarrassment, tending temporarily toward an anti-social attitude. This minimum skill in utterance seems to be a case of instrumentalities and energy developing faster than the power to use them. But this "dumb bound" period of early adolescence is quickly followed by the self-assertion and self-reliance characteristic of middle adolescence when the youth, who naturally enjoys a contest, extends his efforts to verbal combats; he is soon inclined to lock horns intellectually with almost any one;

as Hall says, "disputation is a higher vent for the new zest for conflict."

At the same time these new intellectual tendencies and powers appear, the youth, as has been pointed out, is developing larger social interests and thinking about a wider range of topics and tackling larger problems. Now, according to modern educational psychology, there is but one inference that can be drawn from the above data: here are new instincts, tastes, and powers making their appearance; they must be given a chance to function normally and develop to their greatest capacity; they must not perish by default; the pugnacious instincts combined with the new desire to reason and argue must be given scope and turned to account.

To all of this there is pretty general assent. But disagreement begins on the *how*. No one denies the importance of exercising the reasoning and organizing powers of the mind on worthy material; but with respect to the method of doing this there is still considerable variance of opinion among the experts. Perhaps the means that most definitely divides opinions is the ordinary high-school or college debate, a form of intellectual exertion that certainly gives much satisfaction to the youthful participants. In the usual debate, the disputant has the double satisfaction of publicly expressing his ideas and opinions with reasons and of attempting to convince others to accept them; it appears to be a natural form of adolescent self-assertion. Yet there have been many objections raised to debating, especially as a form of high-school training. It is claimed that, as these debates are carried on, there are serious intellectual, moral, and social dangers, in that the usual high-school debating develops "superficiality, insincerity, and unmoral and anti-social tendencies." It is charged by thoughtful people that debating does not encourage an impartial study of important questions, but, on the contrary, that it tends to develop the ability and desire "to talk glibly." If these are just

criticisms, then certainly high-school debating must be condemned as an unwholesome and dangerous method of exercising the rapidly evolving reasoning powers of adolescents. It is the purpose of this chapter to state the functions, describe the methods, and discuss the possible dangers of high-school debating; the reader will judge whether, as set forth, debating is a desirable educational procedure and worth the time and effort involved.

II

More than twenty years' experience with high-school debating, including both debating clubs and interschool debates, leads to the conclusion that the intellectual and moral dangers that are supposed to accompany debating do not obtain, provided the efforts of the pupils are skilfully directed by an adult who is enthusiastic about the work and is aware of the evils to be avoided. As in the case of the athletic and social activities of adolescents, the one in charge must understand the nature of the participants and have some knowledge of the thing to be done; without the latter, he will fail to be helpful and lose the confidence and respect of the pupils; without the former, he will not be sure to avoid the evils and dangers incident to the work. Thus the whole matter of eschewing harmful influences and realizing the possible benefits here, as in the other activities, is an affair of proper management on the part of some member of the faculty.

What are the purposes of high-school debating? From the viewpoint of adolescent psychology, as already intimated, one of the purposes is to exercise and cultivate the germinating powers of the mind at the right time in their development; otherwise, as Dewey asserts, "they tend to be transitory, to die out, or to wane in intensity." During preadolescence the span of thought has been very limited; now that the rapidly developing reason is beginning to knit the mental centers into

a higher unity, there must be provided much material and many opportunities for the exercise of these higher and broader powers of thought; and it can be shown that formal debating is one way in which this can be done. This seems clear when we consider what is involved in the preparation for and the participation in a debate on a worthy subject under proper conditions.

In nearly all of his work on the regular subjects of the curriculum as ordinarily managed, the pupil is told pretty definitely what to do and how to do it; this is what constitutes good lesson assignments. In a certain sense the resulting performance is decidedly passive. It is true that the pupil is expected and under skilful teaching is encouraged to think, but naturally it is thinking within definitely prescribed limits and on definitely supplied materials. This kind of training is needed and has its place in a complete educational scheme. But very different in kind is the effort expected of the debater. He is not usually told what to read. He is merely given a proposition, the truth of which he is to investigate by any means possible and prepare to convince others of the validity of his findings. It seems to be a case of carrying a message to Garcia; he is given the message and he must by his own initiative and judgment discover a means of carrying the message. This seems much like the requirements of life outside the schoolroom, the requirements of intelligent action and good citizenship.

In preparation for a debate there is a constant need of adapting means to ends. As he reads, all is not fish that comes to the debater's net; he must constantly discriminate, and this means training in the power to evaluate, a power on which the successes in life depend. In the usual assigned lessons of the text-book, the pupil passively attempts to master and use all the material; in reading for a debate, his judgment is always in action; his ability to reject material not suited to his needs is just as important as his ability to retain and apply

the ideas used to support his contention. This implies clear-headed foresight. The success of a debater depends most of all on his power of analysis. He must be able to resolve the question into its component parts and discover where lies the real issue. This is a difficult process for the youthful thinker, but he enjoys making the effort, for it gives scope to his newly evolving powers. Lincoln's remarkable success in debate was due almost entirely to his power to analyze and to discover the central thought of any question with which he had to deal. Careful preparation for a debate certainly exercises this power most vigorously, hence aids in developing it.

While the debate is in progress valuable personal qualities are demanded: the successful debater must have the poise which is based on a high degree of self-control; he must develop that confidence which results from a thorough mastery of the issues involved; he must courageously "stand by his guns;" and he must acquire that quickness of judgment which comes from the habit of vigorous concentration, the ability to see things in their proper relations. There is surely no way to cultivate these highly desirable qualities except by use; and debating at its best gives full scope for all of them.

But debating is a difficult art, as all who have watched the efforts of high-school pupils know. There are many mistakes and faults common to debaters of this age. Any one who has worked with them is often reminded of Junius' description of the dispatches of Lord Hillsborough: "We have strong assertion without proof, declamation without argument, and violent censures without dignity or moderation; but neither correctness in composition nor judgment in design." Lack of "judgment in design" we should expect; for a wisely planned and well sustained piece of argumentation is difficult and requires considerable maturity of mind. But it is not so readily understood why high-school pupils that have mastered geometry should mistake mere assertion for proof. Whatever the

explanation, the youthful debater is prone to believe that his opinion, especially when well expressed and sonorously rendered, contributes toward the winning of his debate. It would sometimes seem that he becomes so enamored of his own ideas and his own voice that he naturally sees no need of any further evidence on the points in question. The simple lesson that debating consists in proving or at least trying to prove is the first that nearly all young debaters must learn. The knowledge that assertion is not proof is a valuable intellectual asset, which only a few mature minds appear to possess. The one who guides the efforts of high-school pupils in debating must expect frequently to call attention to the simple fault here discussed, and often much firmness is needed to root it out.

Again, it is naturally very difficult for a debater of high-school age to maintain a fair-minded attitude toward his subject and toward his opponents. The utmost skill and firmness are demanded of the one directing the work to impress upon young debaters that common courtesy and honesty exact this, and that failure in this matter is sure to lose the sympathy and respect of both the audience and the judges. The debater must learn by observation and experience that very often the simplest and most direct statement of a case is the strongest, for it carries with it an impression of fairness and justice which makes a natural appeal to all listeners. He should, as far as possible, assume the attitude of a seeker of truth rather than an advocate. This means that the spirit of mere contentiousness cannot be allowed to develop, and that anything corresponding to the "trick play" in football tends to antagonize both audience and judges. The young debater is often tempted to depend upon an unexpected interpretation of the question or some far-fetched and ridiculous ways of combining his opponents' arguments. These and like quibbling devices often have a charm for the young speaker, for they exercise his ingenuity and appeal to his desire to do the unusual; but he must be taught that

audiences are never greatly moved by such oratorical jugglery, and that decisions are usually based on something more substantial. The debating team is a splendid place to learn that anything that gives the appearance of mere smartness always militates strongly against one's influence. In general, the debater may soon learn that anything artificial, trifling, or sophistical is very unprofitable and has no place in the serious business of life. Moreover, debaters must be made to see that anything in the nature of a trick or an evasion has an element of meanness in it and will be so viewed by the audience, hence that it is not in the interest of either success or honesty to pervert the facts involved in the debate. Is it not possible that these requirements for successful debating just mentioned may aid greatly in the work of engraining important moral traits in our adolescent debaters?

Nearly all leaders in secondary education have much to say concerning the school's activities and the methods employed that tend to develop leadership; for it is to the high schools, as well as to the colleges, that we must look for training in leadership. Closely following the self-reliance of middle adolescence come qualities that naturally make for leadership; these make their appearance ordinarily at the age of seventeen or eighteen. There is no doubt in the minds of many who have given thought to the matter that debating brings to light another class of leaders than athletics and scholarship. The following testimony on this point, quoted by Professor E. C. Robbins, is from the dean of a well-known law college: "Some of my students go down to the football field, and for a brief time the papers are filled with accounts of their achievements. Then they graduate and go away. Scarcely ever again do I hear or see public mention of them. Other of my students enter the field of debate. For the time being it seems as if their rewards were less than those of the athlete. Then they, too, graduate and go away. But, as the years pass, I continually hear pub-

lic mention of them. Some are guiding the work of towns and cities in which they live. Others are occupying judicial positions of honor and responsibility. Still others are in the political arena. I read of them urging reforms in state legislatures. Their voices resound in the halls of Congress. As governors of states they are holding in their hands the destinies of many people. It is the high-school and university debaters who in after years take an active part in the work of the world."

But all safe and enduring leadership is based on the ability to do and secure "teamwork." *Coöperation* is the modern pass-word to achievement. As was indicated in Chapter III, one of the characteristics of late adolescence is the desire to coöperate; hence many high-school pupils of seventeen or eighteen are ripe for training in all forms of coöperation; and it can be shown that successful debating, like athletic games, depends very largely on teamwork. After the debaters have read widely and systematically on the question and have done their most vigorous and independent thinking, the results of all their efforts must be worked into a comprehensive whole, the unity of which is understood by every member of the team. This requirement of successful debating distinguishes it from all other kinds of intellectual contests. The debater is compelled to make his part of the argument contribute toward the establishment of the one main issue of the question as interpreted by the joint efforts of the team; and he must, at every stage, make his audience see clearly the relation of his work to that of his colleagues. The debater must continually heed the injunction, "Act well your part, for there the honor lies."

These are some of the benefits and this would appear to be the kind of training that high-school pupils may derive from properly directed work in debate. But, as J. G. Holyocke has affirmed, "the supreme advantage of debate is that it compels a man to *think*. A man is not a man unless he is a thinker — he is a fool, having no ideals of his own." The high-school pupil

who has done the constructive and persistent thinking necessary to successful debating, who has been compelled by the nature of his task to study a proposition from every possible point of view, is not very likely to make overhasty generalizations and draw sweeping conclusions, for he has learned by experience the penalty that may be exacted for such a violation of the laws of thought.

The conditions of successful debating, both during preparation and when the debate is in progress, are such that the debater is constantly forced to the limit of his ability; he is engaged in a conflict of such a nature that a single serious blunder in his thinking is pretty sure to mean failure; and red-blooded youth has always loved and been stimulated to the utmost by some form of conflict. The supreme effort involved in thinking long and hard on a subject under the stress of conflict naturally toughens the brain fibers and extends and develops more fully the net-work of nerve processes which underlie all logically constructed thought. Moreover, the youth who has gone through a well-fought debate on any important question and has exhausted all the resources within his reach will readily realize how shallow is his knowledge of other subjects.

III

Unfortunately, debating, like other forms of contest that make a strong appeal to the adolescent, involves both mental and moral dangers, some of which have already been intimated. How are these to be avoided? The answer is the same as that concerning the dangers that naturally accompany social and athletic activities. The adolescent, like the youthful Telemachus, constantly needs a skilful and sympathetic adult counsellor, and experience urges strongly that the mentor in this case, as in athletics, be a member of the faculty. The welfare of the individuals and the success of the undertaking as a whole depend almost entirely upon the kind of person that

is chosen as faculty adviser. It is easy to name the necessary qualities, but the combination is not always easy to find. It should be some one interested in young people and their efforts, willing to give considerable time and effort, somewhat familiar with the principles of debating, able to give sympathetic and intelligent constructive criticism, skilled in the psychology of suggestion, and aware of the educational and social value of debating. Much firmness is often needed on the part of the adviser to discourage superficiality and loose thinking and to stamp out youthful proneness to raise mere verbal issues and indulge in glib talking. "It is a calamity to be able to talk glibly upon any subject." Further, if there is to be debating against other schools, common honesty and a knowledge of what constitutes fair dealing in such matters are fundamental requisites to guard the youthful disputants against both mental and moral harm.

To the one willing to undertake this interesting work, if inexperienced, the following suggestions may be helpful: —

The author believes it is a great mistake for pupils to undertake to meet other high schools in debate unless they have had considerable practice; such an undertaking is likely to lead to an oratorical contest with three speakers representing the school, instead of a real debate; and the temptation to certain dishonest practices on the part of both the coach and the debaters is very great. It is usually found that the most effective way to secure and sustain interest and effort in debating is to organize some kind of a club or society whose main purpose is practice in debate. Adolescents, as we have seen, naturally find satisfaction in almost any form of organization; they profit by conforming to parliamentary law and the constitution and by-laws of such an organization; as Hall observes, they are frequently "great sticklers for rules and technicalities." Considerable benefit comes from the experience of drawing up a simple constitution and by-laws and getting them

adopted, provided the pupils take an active part in the proceedings. The authors of nearly all the books on debating seem to have in mind interschool debating; whereas the present writer is strongly of the opinion that intraschool debating is by far the most important part of the work; it is free from many of the dangers of interschool contests, and an unlimited number can participate. It will be noted that much of what is said in the following paragraphs applies especially to regular debating within the school.

Who shall be members of the debating organization? Experience would seem to prove that better work is done by both boys and girls when they are segregated. The charter members are naturally the boys or girls of the school who are anxious to gain experience in debating; and these are likely to be the more serious-minded pupils that are willing to make a real effort. Because interest and ability in argumentation usually appears in middle adolescence, the membership will naturally be drawn from the two upper classes of the senior high school, with an occasional mature pupil from a lower class. The members must be impressed with the necessity of care in choosing new members; both the members and the school in general should feel that membership in the debating society is an honor. As a result of considerable experimenting, it is recommended that a pupil must be approved by the faculty adviser and secure a two-thirds vote in order to gain membership. Unless the membership is carefully guarded, it is very difficult to maintain a high standard of work. Constant care and influence on the part of the faculty adviser should be exercised to keep the membership thoroughly democratic; any pupil of ability who is really interested in debating and willing to work should be able to gain admission. The number of members must be limited by the constitution, otherwise the opportunities for debating will not be sufficiently frequent; twenty or twenty-five has been found very satisfactory. The basis of membership

here recommended does not interfere with the development of much good fellowship and the enjoyment of occasional functions of a purely social nature. The best debating organization with which the author has had experience comes together two or three times a year for this purpose, also gives one dance in the name of the society. The year always ends with a formal dinner, at which the members gain experience in after-dinner speaking.

Perhaps the next in importance to a competent adviser and a carefully constituted membership is a suitable time for holding the regular meetings. The time must be such as to make possible a full attendance at all the meetings. The ideal is some hour within the school day; this is easily arranged in high schools where an hour or two a week is set apart for the meetings of all the organizations of the school. Where this plan is not in force, it has been found most satisfactory to hold the meeting in the early evening, with insistence on prompt opening and closing. Immediately after school is certainly not a suitable time, as the members are not in a mental condition to do vigorous work or to enjoy the meetings; moreover this is the time when nearly every pupil should be engaged in some form of physical activity. Experience proves that the best results will be secured when the regular meetings occur weekly; and nothing except the closing of the school should be allowed to interfere with these weekly meetings. The faculty adviser or his representative should be present at all the meetings. It is assumed that the reasons for the above suggestions are readily apparent.

The most important of the standing committees that the constitution will provide for is the one responsible for the programs. The questions chosen for debate should usually pertain to present-day topics; and they should be questions that are really debatable. In the selection and statement of questions the committee occasionally needs help. The number of

debaters placed on the program depends upon the length of time allowed each speaker; the custom is two or three debaters on a side. The time allowed for the constructive speeches is usually from seven to ten minutes. The members on the program are expected to prepare fully and make a sustained effort; and this kind of an effort requires at least seven minutes for each disputant. The debate should always be the principal part of the program; however, interest in the meetings may be increased by one or two literary or musical numbers; a weekly talk on current history has proved very satisfactory in some debating organizations. Singleness of purpose is just as important in a debating club as elsewhere.

Unless the English department of the school furnishes the necessary training, the faculty adviser will need to give instruction in the matter of reading and note-taking, selecting and organizing material, analyzing the question and determining the main issue. Suggestions will be needed concerning the fallacies to be guarded against in one's own debating and detected in one's opponents, such fallacies as, hasty generalization, arguing in a circle, arguing from false assumptions, arguing from ambiguous evidence, and unwarranted assumption of causal relations. Nearly all of this instruction can best be given in connection with the regular debates as they occur. The function of the faculty adviser is at least two fold: to give inspiration and encouragement, and to be always ready with thorough constructive criticism. The author has long been in the habit of following every debate with an open and frank criticism of each speaker on the program; and this weekly criticism affords the best possible opportunity to supply from time to time the needed instruction concerning the principles and art of debating. Both the debaters and the other members who have listened to the debate have before them a concrete example of the points with respect to which instruction is given; this is clearly an inductive method of approach and ought to

be the most effective, since the matter in hand is something to be done. From the nature of the case the debaters are always in a receptive mood. If ordinary tact is used, the criticism may, if needed, be very severe. Besides pointing out fundamental faults concerning organization of material, methods of attack, honesty in handling material, and presentation, the criticism should include slovenly enunciation, habits of false inflection and emphasis, and mannerisms of all kinds; in brief, all bad habits of speech which will in the least interfere with effective speaking. It will be understood that adverse criticism must not be crowded on the young debater faster than he can make use of it. However, he must understand from the first that successful debating involves much more than a mere marshaling of logical arguments; he must realize that it is his business to present his arguments in a manner that will cause others to think and feel as he does about the question under discussion. This he is not likely to do effectively by reading a manuscript, however well it may have been prepared. Nothing must come between the speaker and the people whom he is trying to persuade, for they must think only of his arguments and their application to the question. This means that the speaker must be natural in manner and voice, generally deliberate rather than rapid or nervous, persuasive rather than aggressive, dignified rather than dramatic, spirited and vigorous when the thought requires it but not violent; and his voice should be forceful, expressing earnestness and feeling, but not loud.

Anyone responsible for the work of young debaters soon learns that his chief function is to so guide their efforts that real debating will be the result rather than speech making on the affirmative and negative sides of the question; and this is equivalent to saying that much attention must be given to the whole matter of rebuttal. The debaters should early learn that the foundation for effective rebuttal is a relatively full knowl-

edge of both sides of the question, together with much thinking so directed as to lead to a complete and clear analysis of the same. Only a little thought on the part of the reader is necessary to realize that this is most wholesome both intellectually and morally, and that it is a natural safeguard against the dangers that are supposed to be involved in formal debating when indulged in by young people. Generally debatable questions suitable for high-school pupils have been so thoroughly discussed publicly that the debaters on both sides can anticipate all the arguments of their opponents, hence they are able to determine rather definitely beforehand both the material and the methods that may be used most effectively in refutation; there is seldom any excuse for surprises in this matter. Under no circumstances can a debater afford to ignore the case of his opponents. Generally the most effective kind of rebuttal is to show how one's constructive arguments refute the essential arguments of the other side; that is, a skillful debater can sometimes turn his whole constructive speech into rebuttal, and this is always very telling and gives rise to real debating. To accomplish this it is sometimes necessary to rearrange one's whole speech, and this demands considerable resourcefulness on the part of a young speaker; but resourcefulness is one of the qualities for which we are striving when we are giving our time to training high-school pupils in debate.

The most common weakness of young debaters in the matter of rebuttal is that their efforts are scattering and trivial, consisting often of brief, sarcastic remarks on each of the opponents' arguments. As Foster says, "In refutation debaters usually gain in spirit and fall off in substance." This form of weakness can be overcome, if, as a result of careful analysis of the question, the debater anticipates the arguments of his opponents and directs his efforts to meeting only the essential points; it should be an affair of undermining the opponents' whole fortification rather than much sharp-shooting. This is possible only after

a rather deep and broad view of the question has been obtained, a difficult thing for high-school pupils to get, but a worthy and stimulating form of effort. As Dr. Hall suggests, when the pugnacious instincts are developing there is a charm in pointing out the fallacies of one's opponents and making these fallacies appear as flagrant as possible; it is one of the arts of self-defence; it turns debating into a game; it emphasizes the conflict features; consequently the adolescent's instinctive desire effectively to flay his opponents naturally stimulates him to make the supreme effort necessary to gain a deep and broad view of the question if he is made to realize that this is the only sure way of accomplishing his purpose. If the high-school debater repeatedly learns by experience that nothing less than an understanding of the underlying principles involved in the question will lead to thorough and effective rebuttal, he is doing much toward learning how to study problems in a scientific way and toward establishing highly desirable mental habits and attitudes—habits and attitudes the opposite of those which the critics of debating charge against it.

If debating is as valuable a school exercise as its advocates believe it to be, and if it stimulates the participants to do much constructive and independent thinking, the question naturally arises as to the justice and advisability of giving school credit for this work. Fortunately, when the work is directed with the same degree of skill and enthusiasm as successfully managed athletics, the offering of credit is not necessary to induce pupils to attempt debating, nor is it needed to secure their best efforts. Because of the social element in debating, because of its appeal to the ripening powers of reasoning, because of the adolescent's instinctive fondness for some kind of formal contest, and, perhaps most of all, because of the assurance and real benefit which the debater feels that he is gaining, in nearly any high school of seventy-five or more there can be found a sufficient number of pupils to make debating enjoyable and worth while,

regardless of credit. Much of the satisfaction that comes from voluntary work in any line is due to the very fact that it is voluntary; and young people cannot learn too soon that it is the seemingly superfluous work that leads to greatest ultimate success. Hence it would seem, from the standpoint of benefit derived or from any consideration of necessity, that debating may be carried on successfully without any thought of graduation credit; but, on the other hand, from the standpoint of justice to the pupils, it would seem equally clear that credit may be given and counted as part of the required work in English if a reasonable plan is worked out for measuring the amount of credit allowed.

The author has found the giving of credit practicable in the case of interschool debating. After the teams have been chosen, if a member of the faculty keeps closely enough in touch with the reading that the debaters do and the amount of effort put into analysis and organization, there is little trouble in determining the amount of credit that can be justly allowed. When possible this is best managed by having the teams meet daily with their faculty adviser for a class period and report to each other on their findings. This insures continuous progress, encourages full consideration of both sides of the question, and furnishes the machinery for coöperation. In this daily discussion the debaters learn from each other, both by suggestion and by an open-court method of evaluating, all the arguments on both sides. It has been found advantageous to hold these daily discussions for a few weeks before deciding which side of the question the debaters are to take.

IV

With the exception of the last few sentences, this chapter has dealt entirely with intraschool debating, whereas nearly all other books seem to focus on interschool debating. This form of contest is not necessary to the interest or success of

debating within the school; in fact, debaters should reach a considerable degree of skill and confidence before attempting to represent their school against another school. A careful consideration of the objections and criticisms charged against debating leads to the conclusion that the objectors generally have in mind interschool debates; and the tendencies to the dangers and evils of interschool debating are greatly reduced when the pupils are carefully trained and are somewhat skilful; for they have "learned to do by doing" and the temptation to seek or receive illegitimate help is greatly lessened. Although interschool debating is not necessary to the success of school debating, as in the case of athletic games, a strong incentive is furnished when a young debater can look forward to the possibility of sometime representing his school in debate; and in some parts of the country interschool debating is still in vogue, notwithstanding the immoderate amount of effort that is devoted to some of the rival forms of interschool contests.

The dangers and evils growing out of interschool athletics are so numerous and the temptations are so great that in many states there has been developed an elaborate set of rules and regulations, with a view to preventing or at least lessening the evils incident to these contests. In like manner, some of the chances for misunderstandings and some of the temptations to use unfair means can be reduced by some form of agreement between the schools that meet in debate. Experience has proved the following regulations, or their like, to be helpful.

All temptation to take advantage or quibble in connection with the statement of the question for debate will be forestalled if each school furnishes both a negative and an affirmative team. This stimulates everybody concerned to choose a debatable question and to formulate a clear and fair statement of the proposition. It is the custom to bring this about either by arranging a dual debate (each school sending a negative team

to the other school, the affirmative team debating at home) or by arranging a triangle debate (school A sending a negative team to B, B to C, and C to A). This latter plan has a few unimportant advantages. It is extremely desirable to have teams working on both sides of the question, and either of the above plans accomplishes this.

There should of course be a clear understanding with respect to the time allowed for each speaker, the number and order of rebuttal speeches, and the nature of the speeches allowed as rebuttal. Concerning this last point, it is a common practice to limit rebuttal to refutation of alleged facts and to attempting to show how the facts, principles, and arguments already presented affect the arguments advanced by the opposing team; that is, all new material and arguments of a constructive nature are excluded from the rebuttal speeches.

It is also in the interest of fairness that all testimony quoted in support of either side be confined to public documents or books accessible to all parties. For many reasons experience has proved that it is best to exclude the use of private letters from the debate.

It is usually agreed that both the organization of the speeches and the language in which the arguments are expressed shall be the work of the pupils. This is naturally a difficult agreement to interpret and enforce. As in athletic contests, nearly everything depends upon the honesty and correct ideals of the faculty member in charge of the work.

There should be a definite understanding, too, as to the form of instruction to the judges. This is suggested as having proved satisfactory: "Consider only the merits of the debate (not of the question). You are sole judges of what constitutes effective debating, and whether the debating agreement has been violated during progress of the debate, discrediting any violation as the case seems to warrant." At the close of the debate

each judge should hand in an "affirmative" or "negative" vote without conference.

Perhaps the most difficult matter to arrange in a fair and satisfactory way is the method of securing judges. Sometimes very elaborate codes of rules are drawn up in attempting to regulate this part of the procedure; but all schemes that have been tried seem to have proved objectionable in some feature. The least troublesome and apparently most satisfactory plan is an arrangement whereby the public speaking department of some near-by college or university is asked to furnish the judges; this usually results in trusting the decision of the debate to rather young and inexperienced men who have themselves been successful debaters. Another method is the exchange on a fixed date of lists of people that the schools propose as competent judges; each school is given the privilege of striking out the names of all persons to whom there is any objection; then the revised lists are returned, and the judges are selected from the names remaining. This plan frequently proves troublesome in practice. Whatever method of selecting is employed, care must be taken to avoid inviting any one that is especially interested in either of the competing schools.

When interschool debates are conducted in a spirit of fairness, much interest and benefit results. Besides reacting favorably on the debating within the school, the participants are naturally stimulated to make a supreme effort both in preparation and in delivery; interschool relations other than those based on physical prowess and skill are established between the competing schools; and the attention of the pupils of the schools is drawn to other than purely physical attainments.

CHAPTER XIV

HIGH-SCHOOL JOURNALISM

Shall the high school edit and publish a paper? Many principals and faculties that have answered this question in the affirmative have later regretted their decisions. This fact suggests that there are real and frequently troublesome problems involved in the managing and publishing of a high-school paper; but this should not greatly influence the answer to the question. Whenever many people are to be dealt with and coöperation secured, and whenever the nature of the thing to be done, because of the large human element and the voluntary character of the work, makes rules and regulations undesirable, we must expect that there will continually arise many delicate and sometimes disturbing problems. If the thing is worth while from the standpoint of the people most concerned and the means are available, there is only one right decision. The advisability of starting a school paper depends upon the size of the school and whether there is a competent member of the faculty ready to undertake the work. It is usually found difficult to maintain a paper in a high school with less than one hundred and twenty-five pupils.

When a high school is too small to publish and support a school paper, it is often well to arrange with the editor of the local paper for space to be used by the school, either in reporting the happenings of the school or in publishing some of the best work in English. The writing should be done by the pupils and revised when necessary by a member of the faculty.

Many school papers have been started because of the momentary enthusiasm of a small group, or on account of the whim of

some one who naturally likes to try something new; such papers are little more than playthings, are almost certain to fail of their purpose, or will be discontinued after a few issues. Both pupils and faculty must realize from the first that there is a sustained effort to be made and considerable work that must be done on time; but it is a kind of effort that, when properly directed, brings satisfaction and much real benefit to the school and those who do the work. The paper supplies another means of expression, and boys and girls find satisfaction, as we have seen in our study of adolescence, in nearly every form of expression.

What then are the functions of a high-school paper from which come the benefits to the pupils and the school? When written and edited by the pupils and supervised by the faculty, the paper furnishes a natural means of unifying the purposes and the sentiments of the school. A school paper can be made to do this through its editorial columns, which should always be written by the pupils who have at heart the welfare of the school as a whole, and who, because of their age and standing among the pupils, have influence; however, the subjects for editorial discussion may often be suggested by members of the faculty. The paper should be a means of stimulating proper school pride and school loyalty; this it can do in many ways but especially by treating in a magnanimous way all interschool events. The paper should reflect the spirit and sentiment of the school, but these only at their best. The community in which a public school is located is ready to be interested in all that happens in the school, for the school belongs to it; hence the paper will do much toward keeping the patrons informed concerning school affairs and interested in the welfare of the school. Occasionally it may be well for members of the faculty to contribute, with a view to moulding opinion aright and making the pupils feel that the teachers are with them in everything worth while. Perhaps the functions of the school paper, so far as

the school as a whole is concerned, can be best summed up by saying that it is one of the *social* influences of the school, something that both pupils and teachers will speak of as "our."

But it is simpler and more direct to discuss the functions of any phase of the school's work from the standpoint of the individual pupils; every effort must justify itself by meeting their needs and interests. There are two principal ways in which a high-school paper can be made to benefit the pupils: (1) it furnishes a splendid means of training in responsibility, for those connected with it know that the whole school and the community are depending upon them to render this form of public service; (2) it furnishes the most natural and best possible motive for the pupils to cultivate the art of written expression, for they must think of something worthy and interesting to say and then find an effective way of saying it; it is a pleasure for most people to record their observations and experiences, and it is always an incentive to see the result of one's effort in print and know that friends and others will read it.

The teachers of the English department have found the school paper very helpful. The school life, with its great variety of interests and activities, is always rich in subjects that appeal: there are the basket-ball and football games, so full of interest and excitement at every turn and so important as to their results in the minds of the pupils, that furnish the best of material for vivid narrative and description; there is the school mass meeting or rally to be written up, so that the readers who were not present will learn all that happened and get the spirit of the occasion; there should always be new things of interest going on in the laboratories and manual training shops, those closely watched experiments and those ambitious projects in wood or metal; there is the school or class party, old to the experienced faculty, but ever new and appealing to the pupils, that must be described so that it will lose nothing in the telling; there are the science trips and the hikes of the

physical training department, which combine pleasure and instruction in such a simple and natural way, and the patrons of the school are pleased to know about them; then there are the hotly contested debates with a near-by rival school, and the spirit of the occasion and the efforts of the young debaters must be reproduced. All these topics are turned to use by the resourceful teacher of English composition; some of them will supply material for paragraph writing, and others will serve for more sustained efforts. Occasionally the teachers will suggest that an original and well-written piece of regular school work be given a place in the paper — a short story, a vivid description, or a character sketch. Then there are more possibilities than are generally realized in the writing of the little personal and local items. These may be treated in a way that is commonplace and becomes monotonous, or they may be made spicy and occasionally given a touch of humor. One of the well-known and successful writers of present-day fiction began by writing the "personal and local" column for her high-school paper during her senior year; the way the work was done led to her employment on the local daily which printed the school paper; and this in turn led on to better literary opportunities. All of the work on the school paper is of a social nature and gives opportunity for coöperation and responsibility.

All who have had experience know that a high-school paper gives rise to many problems, and it is the purpose of this chapter to discuss some of them. The problems naturally fall into two classes,—those that have just been under consideration and may be called literary, and those connected with the cost, printing, and circulation of the paper and may be called business problems. This twofold division is usually recognized in the creation and organization of the staff, by means of which responsibility is fixed in a business manager and a chief editor. The first thing to be done, when it has been decided that the

school will publish a paper, is to choose the two pupils best fitted to fill these positions; the success of the enterprise will depend very largely on the leadership and skill of the pupils selected. Many ways of choosing have been tried; everything considered, it seems best to allow the entire school to elect these two heads by first casting a nominating ballot, then elect from the two or three receiving the highest number of votes. This method is democratic, and it places the responsibility where it belongs. It may be well in some cases for members of the faculty to draw attention in an unofficial way to certain pupils that appear to have the qualities needed for the respective positions; but, according to the author's experience, the pupils are usually the best judges of one another's ability.

As soon as these two heads are elected, they should meet with the faculty adviser and appoint their assistants. The business manager needs at least two assistants, one to be responsible for the subscriptions and circulation and the other to arrange all matters connected with the advertising carried by the paper. The editor-in-chief should have ten or twelve helpers; the larger the number, the better the division of labor and the more pupils benefited. Something like the following is a usual arrangement of assistant editors: one general assistant to take part of the work that generally falls to the editor; personal editor, who is responsible for all news concerning pupils and teachers; literary editor, whose duty it is to coöperate with the English department of the school and secure contributions from the pupils; athletic editor, who is interested in and understands the various games played by the school; four class reporters, whose business it is to gather all the news pertaining to their respective classes and turn it over to the proper editor; editor of humor, who is to see that each issue of the paper is well supplied with the amusing incidents of the school and other humor worthy of the paper; alumni editor, to keep informed concerning the graduates of the school and report all

matters of interest; exchange editor, who shall secure exchanges with other school papers, read them, and comment on them for the benefit of the pupils, who in some way should have access to these exchanges. An art editor may be added to the list, whose duty it is to coöperate with the teacher of art and make or secure from the pupils suitable cuts for the various departments of the paper and if possible furnish an occasional illustration.

The first meeting of a new staff is very important, and should be attended by the principal, as well as the teacher who is to act as adviser and critic. At this meeting will be determined the size, cost, and appearance of the paper, how often and when the paper will be issued (a majority of high schools publish monthly), and matters of general policy. After each issue there should be a meeting of all the editors and the faculty adviser to make plans for the next issue. Very definite assignments of work should be made to each editor; it is important for the welfare of the paper that all the copy needed be handed to the chief editor at a definite time. It is always a great advantage to those responsible to have more copy than will be used, as this gives a chance to choose the best, relieves worry about shortage of copy, and gives more freedom in the arrangement of the forms in the printing office. Inexperienced publishers usually underestimate the quantity of copy that will be needed. It will be found necessary to give each new staff definite instructions relative to the preparation of copy for the printer and the marks used in proof-reading.

In the meantime the business manager and his assistants must bend every energy to put the paper on a sound business basis. The subscription price of the paper must be carefully fixed after a study of all the conditions (usually about one dollar per year), and a vigorous campaign for subscriptions instituted. The campaign may be opened by a carefully planned effort at general assembly, when the plans and needs of the

paper will be explained, and everything possible done to arouse enthusiasm for the enterprise. When the meeting has reached its climax, every pupil is given a chance to subscribe; a subscription from every pupil cannot be secured. This meeting should be followed immediately by a canvass of the alumni and townspeople for subscriptions. With the exception of some of the alumni who will have to be written to, nearly all the subscriptions should be secured in three or four days. The subscription money must be collected promptly, as the first issue of the paper must be paid for from this source. When the number of subscribers is known, the advertising manager will secure, if possible, advertisements enough to occupy about one-fourth to one-third the space. In presenting the proposition to the business men of the town, he should be able to show them that his paper is a good advertising medium because of the people who read it; it is not business-like to ask for "an ad to help the paper along." If the work is done on sound business principles, a school paper furnishes splendid business training. The rate for advertising should be carefully worked out, the advertisers taking the larger amounts of space receiving better rates. No "special rates" should be given, and the rates should remain fixed throughout the year. It will greatly aid the manager in his work if he secures from his advertisers a large number of year contracts, the contracts stating the amount of space taken and the price paid. Sometimes the price is estimated in inches and sometimes in fractions of a page, an average rate being about twenty-five cents an inch.

A simple but adequate system of accounts for both the circulating and advertising managers should be devised at the beginning; and these accounts should be audited once a month, otherwise serious trouble may arise, as the present writer knows from very embarrassing experiences. It is the custom to give every advertiser a copy of each issue in which his advertisement

appears. If there is more than one competent printer in the place, the contract for printing the paper should be given to the lowest bidder; the printers who wish to figure on the job are furnished with duplicate memoranda respecting the size of the paper, the kind of type, and the quality of paper to be used. A receipt should be given without fail for all money received for subscriptions and advertising, the corresponding receipt stub showing clearly the amount received; the money collected should be deposited promptly in a local bank and all bills paid by check. The reasons for these precautions are discussed in a later chapter.

The fate of the paper, especially during the first year, will depend largely upon the judgment, tact, and leadership of the faculty adviser. The qualities needed are practically the same as are required for the management of any of the other social activities of the school; if to these is added a little experience in publishing, the work will be likely to go more smoothly and with less waste of energy.

Any one who has had experience with pupil publications will anticipate certain weaknesses natural to youth and will guard against the consequent troubles. He will expect the pupils to exhibit the best of intentions but considerable poor judgment and taste: they will have to learn news values; they will sometimes wish to print items that might injure the feelings of some of their readers, because of their undeveloped appreciation of other people's viewpoint, and because of their desire to make the paper spicy; and they will frequently want to make insinuating references to personal happenings known only to a little group, because they are anxious to get a joke on somebody. It will be found, too, that the average high-school pupil's sense of humor is not always trustworthy, but that it needs training. It will be necessary frequently to remind the members of the staff that the paper is to be read by many outside the school, hence that much care must be taken

not to color matters in such a way as to give a wrong impression of the school and its management.

While constructive criticism of the school is always wholesome, the teacher in charge may find it necessary to inform the pupils outside the staff of the difference between true criticism and mere unpleasant fault-finding. Criticism of the efforts of the editors should be confined to those pupils who have already made a successful contribution to the paper and have thus earned the right to speak with authority in the matter.

For all this work the adviser will need patience. It will be advantageous often to sit down with the young writer and carefully explain why changes in his copy are necessary. Adolescents, as we have seen, are not naturally amenable to arbitrary or dogmatic treatment; their opinions and personalities must be respected.

The work of editing and publishing a high-school paper at times may seem discouraging, since the members of a new staff must be trained each year, and they will repeat the mistakes and show the same indiscretions as those of previous years. However, something can be done toward establishing and fostering good traditions for the paper; and this will make the adviser's task somewhat easier.

In nearly any high school it will be found that the pupils are willing and often anxious to undertake the publication of a paper, because youth is continually seeking new forms of expression, is naturally optimistic, and the pupils have no way of knowing the difficulties involved; but the final decision concerning the launching of a school paper must come from some one on the faculty who is willing to pay the price in time and energy; if such there be, remuneration will come in the same way that all efforts for the welfare of young people are compensated.

CHAPTER XV

ATHLETICS

I

Whatever notions one may hold concerning high-school athletics, whatever misgivings about the unalloyed benefits and educational values one may have, and whatever aversion one may feel to the added responsibility growing out of their control and management, athletics we have and will continue to have, hence, one of the high-school problems. The adolescent boy that comes to us must have action of some kind. As Prof. Fiske of Oberlin expresses it, "The breath of life is in his nostrils. Red blood is surging in his veins. He is impatient at overmuch talk on any subject, when the impulse to do things and to dare things, the impulse for activity, adventure, and danger is tugging at his heart strings." If the school does not provide the form and quality of action that his nature craves, he will find the ways and means, and often to his detriment, and sometimes at the sacrifice of the good name of his school and the peace of mind of the teaching staff.

The attitude of high-school faculties toward athletics, as toward social activities, in most places, has passed through three stages of development: (1) Opposition on the part of school authorities existed nearly everywhere fifty or sixty years ago; this was in the "good old days" when the only aim of the schools was to inform and train the intellect; at this time athletic games were, not only thought of as an interference with the real work of the school, but they were viewed as a positive evil and not allowed in connection with the school. However,

there were in those days many "student pranks" of a very unpleasant nature to deal with and occasional outbreaks calling for the most drastic action by the authorities. (2) The next stage may be called the period of toleration without control. Principals and teachers began to realize that the boys would organize and engage in athletics regardless of whether they were given permission. Interscholastic contests were arranged and managed by the boys and other irresponsible people. The situation became extremely discouraging because of the conditions which developed, and the frequent disgraceful occurrences on the athletic field; there was trouble about "ringers," trouble with the incompetent or unfair officials, trouble with the too partisan spectators, and trouble about finances. (3) The final stage of development, which has overcome nearly all the difficulties, may be called one of coöperation; the school, the teachers, and the contestants work together on all the problems, and the results have come to be generally satisfactory. Most of this chapter will be occupied with a discussion of ways and means of successful coöperation.

II

From the viewpoint of this book, the psychological aspect of high-school athletics is most interesting and important. In early adolescence the boy is living over again the feudal period of history when chivalry was one of the best characteristics of the race and when personal loyalty to some hero controlled the will. The boy's ideals now are alertness, shrewdness, skill, and the other feudal virtues. In middle adolescence, the age that finds most of the boys in the senior high school, the youth is repeating the period of the constitutional monarch; his thinking and his doing are characterized by self-assertion, gradually changing into coöperation; and the progress of his will-development is marked by his degree of self-reliance, gained through struggle of some kind. His ideals now are individ-

uality, resourcefulness, good fellowship, and other manly qualities. When all these characteristics are translated into terms of modern athletics, and when the coaching is in charge of competent young teachers with high ideals concerning physical and moral development, it is easy to perceive how significant for the welfare of the individual and how rich in possibilities for the upbuilding of standards in the school the whole matter of athletic training becomes; and the recapitulation theory of development proves very suggestive.

The reader does not understand the nature of adolescence if he fails to realize the powerful influence for good or for bad (often mixed) that almost any form of organized athletics demanding teamwork may become. The reflex of pleasure and satisfaction is so intense that it amounts to almost intoxication. Systematic gymnastic drill has an advantage in that it may result in the most symmetrical physical growth and development, and exercise in the form of work brings to maturity many desirable moral qualities; but vigorous play makes the strongest kind of appeal to the whole soul and body. The proverb, "man is whole only when he plays," suggests the vital unity of soul and body that results from the enthusiastic and absorbing participation in social games. For the various forms of athletics, as Dr. Hall expresses it, "the pulse of adolescent enthusiasm beats highest;" and we must remember that "play is always and everywhere the synonym of youth." Athletic sports make this powerful appeal, not only because they give an outlet and satisfy the strong cravings of youth for intense physical and mental activity, but because, according to Gulick, the best games are made up of muscular coördinations which were early and long useful to the race and thus involve racially old elements and awaken deep basic emotions. This explains why games that have made the strongest appeal have always been composed of the same "underlying neuro-muscular activities"

and have had the same "psychic content;" it is a case of phylogenetic muscular and psychic history repeating itself.

It must be borne in mind that whatever activities are entered into with zest and enthusiasm, absorbing the whole being, become significant for the individual at least for the time being and hence are the most powerful formative influences. It is well to remember, also, that the character-forming influence of athletics, like other influences, when deferred too long, will fall far short of producing normal results; for, as has been shown in an earlier chapter, there is a time and sequence of development of the nerve areas and fiber extensions which must not be ignored; activity must follow nature's intention and "fulfill the law of nascent periods." Fortunately, in most cases, the instinctive interests of youth are found to be our best guides in this matter; and his indulgence in sports is not an expenditure of non-productive energy, as some have asserted, but, on the contrary, it is a most highly productive process, resulting in the development of physical, mental, and moral qualities extremely valuable to both the individual and society.

In discussing the effects of athletics, the development and training of the motor centers naturally come first. Muscle training is always a brain-building process. Plato preferred ignorance to knowledge that does not develop the motor side of our nature and give self-control. For Hall, "will action is the language of complete men and the goal of education," "and sound ideas rest on a motor basis." Now, the motor centers may be trained by work, which is always prompted by some object to be attained without any reference to the effect upon the individual, or by mere exercise, which aims to develop physical health and strength, or by pure play, which is instinctive and comes in response to a craving for activity. However, both psychology and experience tell us that the qualities of motor development resulting from competitive games are very different from those derived from either exercise or work. Comple-

tion, with its social setting, especially for the adolescent, is necessary to call forth the utmost effort; and this effort becomes "an erethic intoxication," causing the tension needed for the complete flushing and enlarging of the blood vessels and for bringing into action the nascent fibers and cells, which would atrophy if not used and irrigated. When maturity is reached the possibility for complete development has passed. The adolescent must play for his "second breath," a phenomenon characteristic of the period, if the deeper sources of his power are to be reached and the highest motor development attained. It seems to be analogous to the toughening and refining of the oak's fibers which result only from the strain and violence of a hill-top exposure to the fiercest winds. Then, too, there is a subtile quality that enters into the motor developments of the athletic field, due to the mere pleasure that naturally accompanies the motor discharges impelled by social motives; these impulses and emotions, largely social in their origin, have a wonderful toning effect on the whole process, giving, not only a better immediate result, but tending to become permanently associated with any form of vigorous motor discharge. Moreover, the exigencies of all strenuous games, the continuous necessity of meeting the unexpected, tends to develop in the motor centers the greatest possible flexibility and readiness to respond to immediate surroundings in an effective way; and, best of all, much of this motor control and skill, through repeated use, is turned over to the reflex centers to be used in later life in all sorts of emergencies, so that there results a permanent asset in the form of greatly increased motor resourcefulness. In brief, the body becomes an effective organism. All this motor development is possible only when the proper games are played and at the proper time to comply with the law of nascent periods.

But the qualities of a more purely mental nature that may be matured on the athletic field are also worthy of serious atten-

tion. All writers on these matters call attention to the Greek system of education in which all physical training was for the sake of mental training, the two never being thought of apart. With the Greeks a sound, well-developed body implied a sound, well-developed mind. The Greeks, too, were fully aware of the significance of adolescence in education; the Panhellenic games constituted a characteristic expression of adolescent needs; in these games were developed, as in the various forms of modern athletics, quick thinking, judgment, mental resourcefulness, and concentration. But the modern sports are better suited than were the ancient games to stimulate these mental activities, because of their intricate and highly refined system of rules.

Perhaps the greatest possibilities in high-school athletics are to be found along moral and social lines of growth and development; in practice it is not easy or wise to separate moral and social training, since in practice all moral conduct has its social setting. Dr. Hall boldly asserts that "play at its best is only a school of ethics," giving "courage and confidence," tending "to simplify life and habits, giving energy, decision, and promptness to the will," and bringing out individuality. The constant self-control and coolness of temper under the most trying circumstances necessary to the highest success of the player tends to become habitual; and, if this happens, it is one of man's greatest assets. Since most of the athletic activity of high-school boys is devoted to teamgames requiring perfect coöperation and submission to leadership, perhaps the highest moral quality developed is self-sacrifice; there is a constant demand that the individual forego his own wishes and ambitions for the interests of the whole; obedience to the coach and the captain and loyalty to the team naturally become his prime motives; self must be voluntarily surrendered and merged for the common good; and thus is evolved a spirit of self-sacrifice and devotion, which, if they become habitual,

will be found among the elements of his character. Not only must the player learn loyalty to his team and to those directing his efforts, but he soon thinks of himself as a representative of his school; to use Professor G. H. Palmer's phrasing, as the football player "puts on his uniform, he strips off his isolated personality and stands forth as the trusted champion of an institution." Loyalty, as will be shown in a later chapter, is without doubt the strongest, safest, and most effective motive with which to appeal to the adolescent.

Then, too, no better scheme could be devised than modern team athletics to give the adolescent a first-hand knowledge of himself and his own reactions, something he strongly desires. Here he is continually measuring his strength, his speed, his alertness, his self-control, his resourcefulness, his endurance, and his courage by means of concrete tests furnished by others of his own age; it is an examination where there is no chance for "bluffing" or "cribbing," an ordeal which tries his soul as well as his muscles. Since a knowledge of one's weaknesses and shortcomings is the chief psychological need of him who would improve, this thorough and voluntary measuring and testing is surely most wholesome.

But there are, also, negative advantages and benefits claimed for athletics when pursued in a whole-hearted manner. In the study of adolescence we found that there is a rapid increase of energy of all kinds and that this natural energy must be given some channel through which it can assert itself in action; this is necessary both for the safety of the individual and for his further development. Much of this marvelous flow of new energy is either directly or indirectly associated with the emergence of sex-consciousness; the mental processes are naturally closely correlated with the development of sex during adolescence. We have found that biologists distinguish between the primary and secondary sex characteristics; Dr. Hall has suggested that the secondary traits and manifestations can prop-

erly be thought of as "long-circuitings." This analogy, drawn from the science of electricity, seems helpful; it is only the short-circuits that are dangerous to the apparatus and the machinery involved. The problem of dealing helpfully with adolescents becomes largely a matter of understanding the secondary sex manifestations and providing long-circuits through which they may freely and safely flow and thus find expression. The activity involved in any of the more strenuous forms of team competition and its social environment so exalts the spirit of youth that "the physical pleasures of it diffuse, irradiate, and mitigate the sexual stress just at the age when its premature localization is most deleterious." Thus high-school athletics may well be considered one of the safeguards against the vices of which the adolescent naturally stands in so much danger. Besides contributing to the physical and moral safety of youth, athletic games furnish him with a compelling motive to refrain from any form of conduct that weakens his body and thus lessens his chances for the highest success; to be physically superior is a joy and a glory to a young man. There can be no doubt that athletics provide a vicarious outlet for the adolescent impulses which are surging so violently and driving so many splendid boys into the habits and vices characteristic of the period.

If the foregoing analysis of the relation between adolescence and athletic activity is correct, adolescence is preëminently the athletic period; for our discussion has attempted to show that modern athletics furnish a pleasant, natural, and effective way of developing and coördinating the motor centers and thus rendering the individual readily adjustable to his changing environment, that they are a means of stimulating to the highest degree certain useful forms of mental activity, that they afford social and moral training by making a strong appeal to the motive of loyalty, and that they aid in safeguarding against vices peculiar to youth.

III

So far the discussion has assumed athletics at their best. If we are to have athletic games at their best, the evils and dangers that frequently accompany contests between schools must be guarded against. These evils and dangers may grow out of the players' own enthusiasm and intoxication, or they may come from the over anxiety of the coach to win his games, or they may be the result of the ill-directed enthusiasm and partisanship of the school, the community, and the spectators.

1. All athletic games, as compared with general gymnastic training, are of necessity somewhat specialized forms of activity, hence the tendency toward a one-sided development peculiar to each particular form of sport. This is sometimes shown when the football player tries to transfer his energies from the gridiron to the basket-ball floor, where he has certain ideas and movements to unlearn and many new ones to learn. This difficulty can be somewhat mitigated by providing several forms of athletics and by requiring of all athletes some preliminary work in the gymnasium, thus securing a more symmetrical development.

2. In places where high-school athletics have been thoroughly organized and the schools have close and bitter rivals, there has resulted a strong tendency to overtrain. Kinds of training that might be safely used in colleges with young men have been employed with high-school boys in their middle teens; and permanent injury to some of the participants has resulted, due to overstraining or over-developing certain organs, most frequently the heart. This state of affairs has come from several causes, chief of which is over-estimating the importance of victory, to which the glamour of the press has contributed its share of untoward influence. But this is an evil for which the boys are not responsible. This mistaken zeal rests with the coaches and primarily with the principals of the schools. It

is a condition that can be corrected when those responsible have the wisdom and courage to place the welfare of the boys above the false pride of the school and the community.

3. Out of these cases of over-emphasizing the glory of winning often arises non-educational and unethical conduct in the form of unsportsmanlike tricks and methods on the part of the players and bad manners on the part of the spectators. When the school and the community behind it become imbued with ideas that lead to immoral and discourteous conduct, considerable courage and determination on the part of those in authority are necessary. But such a condition can and must be changed, for the good of all concerned, but especially for the physical and moral safety of the boys. In the first place, there is no excuse for such a state of affairs to develop; and, in the second place, the reformation can be effected and the traditions changed by the united effort of the faculty, the board of education, and a few influential people of the community, whose influence may easily be secured. If there is no other way, athletics must be discontinued for a year or more, so that all concerned may know that some one is in earnest and must be reckoned with, and so that the undue partisanship may have a chance to subside. The author knows of instances where this has been deemed necessary; but in his own experience the influence of the faculty and the coaches of the schools concerned, working persistently through the pupils, has been sufficient to effect the desired change and establish a wholesome attitude between old-time rivals.

The following experience may be suggestive, although to some readers it may seem a rather drastic form of procedure. In a high school of 350 pupils, where every one supposed athletic matters were well in hand and high ideals prevailed, a hot-headed captain, displeased with what appeared to be a mistaken decision of a young and incompetent official, led his team off the field, contrary to the advice of the teacher-coach.

The next Monday morning the principal called the long-distance telephone into service and canceled the remaining games of the season's schedule. It seemed to the principal that for the good of the boys, as well as the influence upon the school, a little discipline was more important than completing the schedule; and the principals of the other schools involved saw the matter in the same light. The results appear to justify the action taken, for during more than ten years following there has been no further trouble.

It seems to many that athletics rank with military training in the possibilities afforded for thorough and effective discipline; and athletics have the advantage in the fact that submission to rigid discipline is more voluntary than in the case of military training, a very important consideration when the nature and needs of the adolescent are consulted.

4. Sometimes it is charged that athletics distract the boys from their studies and thus create a serious problem. To this it may be said that (1) education is not wholly a matter of studying books and (2) the rules of eligibility in all of the states where interscholastic athletics have been given thoughtful attention are so framed that their honest and rigid enforcement makes it impossible for any boy to neglect his school work very seriously and represent the school on its teams. During an experience of twenty years, athletics have proved an incentive to successful school work as well as to gentlemanly conduct.

5. In athletics, as in all other vigorous activities, there is constant danger of physical injury; and this to many, especially the mothers of the boys, seems a very serious consideration. It is the boy in his early adolescence that is most liable to suffer physical harm, because of flabby muscles, loose joints, and lack of correlation; but nature has provided pretty carefully against overeffort during this awkward age, for most boys at this period are instinctively lazy and are thus protected against

overexertion. Of course boys at this immature stage of development must not be allowed to take part in the more strenuous athletic feats. The liability to physical injuries can be greatly decreased by barring all boys whom professional examination shows to be physically unfit, by adequate training before participating, by proper equipment, and by constantly reforming the rules of the games in the interest of the players. All of these precautions are being employed more and more as experience accumulates and school authorities better appreciate the problems involved in modern athletics. But, when everything possible has been done to safeguard against physical harm, we must expect accidents; there is a risk that must be courageously taken whenever life is lived to its full possibilities either in or out of school; and "the whole philosophy of youth," as R. S. Bourne tells us, "is summed up in the word, Dare," and there is no daring where there is no danger. Dr. Hall asserts that athletics furnish "a wholesome vent for the *reckless* courage that would otherwise go to disorder or riotous excess." Better an occasional broken nose or bone, "or the sacrifice of an occasional life of our best academic youth than stagnation, general cynicism and censoriousness, bodily and psychic cowardice, and moral corruption, if this indeed be, as it sometimes is, its real alternative."

Around the evils and dangers just discussed center most of the problems that must be met and solved for each community according to the local conditions. It will be noted that most of the trouble growing out of athletics is not due to any elemental evil; hence, although serious, it is not fundamental. The difficulties have arisen largely from the propensity of unregulated adolescent enthusiasm to overdo and from uncontrolled accompanying influences that have been allowed to develop because of the lack of competent leadership. Thus there is no reason for discouragement relative to the final outcome; success depends almost entirely upon a knowledge of adoles-

cent boys and their needs, skill in meeting these needs, and ability to understand and make the most of local conditions.

IV

Those who have had experience with high-school athletics are aware that both the physical and moral welfare of the contestants and the success of the teams depend very largely on the all-round efficiency of the coach; hence the coaching problem is the consideration of paramount importance.

Ever since it has been deemed necessary to furnish a coach for high-school athletics, it has been a rather common practice to secure some young fellow who has played an important position on a big university team or has won his "letter" and give him full responsibility for the athletic activities and the welfare of a group of high-school boys. The author has learned by discouraging experiences the dangers and troubles that are likely to accompany this method of procedure. Very seldom is it advisable to allow any one not a member of the regular teaching force to coach high-school athletics. It is not generally safe to trust this important and delicate piece of work to any one who has only a temporary interest in the athletic welfare of the school or who is only interested in the winning of games. The permanent interest which causes the wise coach to look forward in his planning and training at least three or four years and the deep sense of responsibility for the general welfare of the boys are not likely to be found in any one outside the faculty. Then, too, a coach who has only athletic duties connected with the school cannot be expected to appreciate the place of athletics in the entire school program; without an understanding of the true place of athletics in the whole educational aim of the school there will be apt to result a lack of unity of effort. It is very seldom that any one can be found for whom the boys will feel the same respect or in whom they will have as much confidence as an efficient teacher of the school. Hence, unless it is pos-

sible to employ a regular physical director, it seems best to trust the work to an intelligent young teacher who is willing to interest himself in the branch of athletics for which a coach is needed; if he will throw himself into the work enthusiastically and be sincere in his dealings with the boys, knowledge of the game and skill in coaching will grow; at least such has been the experience of many in securing coaches.

It is true there are other qualifications needed besides general intelligence and enthusiasm for the work. The successful coach must have the ability to secure the hearty coöperation of the boys; and it is important that he or some one should enlist the support of the whole school. Any one responsible for the athletic activities of a high school should have at least such a knowledge of adolescent growth and periods of development as is included in the adequate training of a secondary-school teacher, that he may be able to watch the growth of the body and its organs, especially the heart, and to discern the changing capacities and needs of the individual players. The coach should be competent to give every boy who is a candidate for a place on any of the school teams a simple heart test; if this preliminary test shows any trouble whatever, the boy must be sent to a physician for a careful examination before he is allowed to take part in any athletic contest. The teacher in charge of any particular branch of athletics should have an interest in and respect for all kinds of physical training; the star in one branch often lacks athletic perspective. The safe coach must be imbued with the idea that athletics are primarily for the benefit of the athlete, and not for the pleasure of the spectators or the glory of the school; educational athletics are the only kind that a high school can laudably support. Above all, the coach must stand square and firm on all moral issues; his ability and willingness to do this is just as urgent as his knowledge and his skill in the technique of the games.

Whatever the type of coach, he must have the coöperation

and support of the other members of the faculty, especially the principal; and, if he is competent, it should be so managed that he is given at least a little extra salary on account of his coaching. It is very fortunate when there is a sufficient number of competent men on the teaching staff so that each branch of athletics can have its own coach; this makes the work less burdensome on any one, and it is a means of securing the interest and influence of a larger number of men for this important work. If the men who do the coaching are effective leaders and men of character, they will receive a very satisfying return for their services in the form of increased influence and appreciation both in the school and the community they are serving; they will have inspiring contact with life at its most fascinating period of development, when it is the most responsive and when the seeds that are sown strike root most deeply and bear fruit most quickly. The competent and sympathetic coach always has a valuable asset in the group of young, enthusiastic companions and friends with whom he surrounds himself.

V

The next topic to be discussed is one on which school men and physical directors do not always agree. What games should be played by the high-school boys; and what factors determine the choice of these games? From what has already been said, games should be selected that will help to develop health, strength, agility, suppleness, skill, vigor, speed, endurance, physical judgment, decision, virility, coöperation, restraint, self-sacrifice, and courage; for these qualities all belong to the highest type of manhood. We all agree on the qualities desired but not on the games that are best suited to their development. In most places in the United States athletic contests are confined to football, soccer, basket-ball, baseball, tennis, and the various track and field events.

1. Football without doubt receives the greatest amount of

adverse criticism. It is objected to because of its strenuousness and because of the number of serious accidents resulting. It is strenuous and always will be, like any form of physical contest where personal contact is allowed. But for those who are physically fit this is one of the qualities which recommends the game; it is a quality which appeals strongly to nearly every virile youth, to those seeking their highest development, and to the spectators. Football is a real struggle between peers. It is doubtless the strenuous qualities of the game that led Dr. Hall to characterize it as "a magnificent game if played on honor." No game better provides for training in alertness, physical judgment, decision, physical and moral self-control, and courage. Here the able-bodied youth can learn to fight under rules and supervision, something very helpful in developing his sense of honor and courage and in making his masculinity ring true. We must not eradicate the fighting instinct of the adolescent, but we must educate and temper it aright. We must furnish some means to the passive, hesitating, shrinking, obstructed-will type of boy that will make vigorous action easy, as Professor Horne expresses it, that will "open the flood-gates of nervous energy and connect mental and physical reactions." If such a boy can only be induced to play the game, he will be sure to gain in confidence. On the other hand, the boy with the precipitate will, who tends to express himself in unrestrained action, very much needs the discipline of some kind of strenuous contest where there is a real clash of wills and where law and authority must control; his overimpulsiveness, conceit, and natural adolescent self-assertion greatly need the rigid discipline of the gridiron.

Perhaps one piece of expert testimony will help us to understand. This is the way Victor Kennard sums up what he owes to football. "I learned to control my temper, to exercise judgment, to think quickly and act decisively. I learned the meaning of discipline, to take orders and carry them out to the best

of my ability without asking why. I had through the training regular habits knocked into me. I learned to meet, know, and size up men. I learned to smile when I was the most discouraged fellow in this great wide world, the importance of being on time, a better control of my nerves, and to demand the respect of my fellow-players. I learned to work out problems for myself, and to apply my energy more intelligently — to stick by the ship. I secured a wide friendship which money cannot buy." Here are about fourteen benefits that Mr. Kennard claims he derived from playing football, all of which tend toward the highest success in almost any human activity.

To guard against injuries occurring in football there are at least five things that can be done in the way of taking precaution: boys can be kept out of the games played by the regular team against other schools until they are pretty well along in middle adolescence, thus avoiding the more vigorous and dangerous contests; they can be kept out of interschool games until they have been taught what to do when tackled vigorously and in general how to care for themselves in the heat of the game; they can be kept out or taken out of the game when not in good physical condition, including cases of extreme fatigue (recent changes in the rules make it convenient to do this); they can be properly dressed and equipped for protection; and they can be taught to make a liberal use of open plays for advancing the ball. The rules are being improved from time to time in such a way as to encourage open formations and thus lessen the dangers that accompany mass plays.

2. Soccer is a splendid game, much in favor with principals and others who have an interest in the welfare of the boys, but not adequate thus far to take the place of regular football in the minds of the more vigorous adolescent boys or the spectators. It is a game in which the mere size and weight of the player do not count very much; it develops skill and alertness; it calls for quick decisions and coöperation; it cultivates self-

assertion; and it is free from the dangers of mass plays and tackling. It is a game that can be played by boys at twelve and continued to almost any age. If soccer can be made popular, much benefit may be derived from it, and it may be used to furnish preliminary training for regular football.

3. Basket-ball is the only vigorous winter game that has made a very strong appeal in this country to either athletes or spectators. It provides a place for a different type of athlete; the quick, wiry boy with strong arms and shoulders can soon learn to play the game successfully if he can be taught to use his mind and muscles properly. Basket-ball has nearly all the advantages of lacrosse, which is an excellent game for nearly any type of boy, but not yet played much in this country. From the standpoint of health, basket-ball is not so desirable for either players or spectators, since it is usually played indoors. It is a game that needs very careful regulating, because it puts a great strain on the heart; this tendency becomes less as the players become expert and depend on skilful passing of the ball instead of constant running. Basket-ball appeals to adolescent boys, because it is strenuous and demands a high degree of self-control and coöperation; and it appeals to the spectators, because the rules of the game are easily understood, nearly all that happens on the floor can be readily seen, and the spectators can be comfortably seated during the game. It is a game that can be made a splendid training in self-sacrifice and loyalty; for the highest success demands perfectly developed teamwork, as distinguished from individual starring on the part of the players. Basket-ball calls for perfect heart action, hence the coach should be very watchful of the condition of his players. Healthy boys can begin playing basket-ball at twelve years of age and continue till maturity.

4. According to Hall, baseball "represents activities that were once and for a long time necessary for survival," "muscular coördinations that have been of great racial utility;" the "run-

ning and dodging with speed and endurance, and hitting with a club, were all basal in hunting and fighting." Because of its ancient phylogenetic origin, if one accepts Gulick's theory, baseball is very interesting to adolescents of all ages; and, because of the many forms of skill, accuracy, and judgment demanded, it offers most excellent psychoneural and muscular training, thus contributing much toward perfecting the whole organism. Baseball can be played safely and successfully from the age of ten to thirty; and it can be made helpful to any type of athlete. Because the game is not as strenuous as the other coöperative games, boys are inclined to think that a rigid observance of the laws of health is not so necessary in baseball; hence one of the first duties of the coach should be to clear up the boys' thinking on this matter. The high degree of accuracy and control demanded by certain features of the game implies that the smaller muscles and their corresponding nerve centers must work with perfect coördination; and many recent experiments in educational psychology have proved that these finer adjustments, calling for nerve-control of the smaller muscles, are the first to be affected by any change in the physical condition; success in batting is especially dependent upon both physical and mental tone, since all the smaller muscles connected with vision are concerned. It is often difficult to get boys to realize the relation between the habits which affect health and their success in baseball, because they are not able to "feel" the lack of tonicity that produces the unfavorable results in their playing. It was only by a long series of experiments, so arranged that the effect of physical condition on the more delicate coördinations could be definitely measured, that the actual facts concerning motor control were brought to light. Thus the educational possibilities of baseball are important and numerous.

5. Training for the various track events may be made to contribute much to the health and physical effectiveness of

nearly all boys, although they are not so rich in possibilities for mental, social, and moral development. Because the social and coöperative elements are somewhat lacking, much enthusiasm and ability to impart enthusiasm are needed on the part of the coach. The different races differ considerably as to the age at which they can be safely entered and the length of the training period needed; in general the long runs require more maturity and longer training. Sprinting can be safely started at twelve; low hurdles, at fourteen; high hurdles, at sixteen; and the distance runs had better be postponed till seventeen or later. There are sound physiological and structural reasons for all these statements. All matters of health, including especially the condition of the heart, must be supervised by the coach, as in other forms of athletics.

The ages favorable to participation in the usual high-school field events are, according to a chart prepared by Dr. Naismith of the University of Kansas, as follows: Broad and high jump, the entire period of adolescence; discus throwing and pole vaulting, from sixteen to twenty-five; javelin and hammer throwing, from eighteen to maturity (the latter may well be omitted because of danger to the spectators); a well built boy can begin putting the shot at seventeen. The individual equipment for these track and field events is easily obtained and any number can be trained to advantage.

6. Whenever possible a high school should have tennis courts, the number depending on the size of the school. The age at which boys and girls enter the senior high school is just the right time to learn to play tennis. It is a game suited to the needs of practically every one, for it can be made as vigorous as the players desire. The game affords splendid motor training under very healthful conditions. It is free from the dangers of other forms of athletics; and there is very little necessary expense after the courts are provided. Expert coaching is not necessary; and tennis playing is easily encour-

aged, the interest and attention of some member of the faculty being all that is needed. Various tournaments should be arranged within the school and as many as practicable with other schools.

Because of the great variety of physical needs, abilities, and tastes, and because adolescence is the time when individual differences make their appearance and when each function as it appears must be exercised if the greatest effectiveness is to be attained, a high school should encourage and support as many forms of athletic activity as possible. If there is to be vigorous interschool competition, it is necessary to be guided somewhat in the selection of the kind of games by the forms of athletics in vogue in the near-by schools; in order to secure the chief benefits of athletics, the competitive and social elements, which appeal to the instincts and the emotions, must not be lacking; no series of interclass games will arouse the interest and secure the effort in the form of careful training that results from interschool competition. The interschool contests are fraught with both some danger and unusual possibilities. It is worth much to learn early in life to treat an opponent with courtesy and consideration, a very difficult lesson when the contest is one that calls for the utmost effort of those opposing each other. The visiting team must be considered the honored guests of the home team and the school, and all the relationships involved must be governed by this idea. Frequently both the members of the team and the school have much to learn concerning the proper treatment of the officials; partisanship naturally runs high and trying conditions arise; but this only furnishes a better test of conduct from the standpoint of sportsmanship and courtesy.

When possible there should be arranged "second team" or "light weight" games, for the purpose of encouraging a larger number of pupils to participate and to provide an organized team to play against the regular school team. The

degree of benefit derived from the different athletic games can be pretty safely judged by the degree of interest, spontaneity, and zest which each arouses.

VI

In conclusion, it seems best to add a word concerning the management of high-school athletics; for here problems are involved that must not be neglected if troubles are to be avoided and the best results obtained.

Whatever the size of the school, it will be an advantage to organize an athletic association. This organization should include in its membership all pupils that can be interested in athletics or that are willing to aid in their support. This association is a means of increasing the unifying influence of athletics upon the school: it gives every one who wishes it a voice in deciding a few things with regard to the management of the athletics of the school and provides for organized financial support. If the association is large, as it should be in a large high school, it is likely to become unwieldy for purposes of thorough discussion and careful decisions, and it does not provide a means of definitely fixing responsibility.

These difficulties may be overcome by organizing a smaller group within the association with more power, to be known by some such name as the "athletic council," and composed of the president of the athletic association, the captains of the various teams, the coaches, and the principal of the school. The duties and powers of the association and the council should be carefully defined by a written constitution and by-laws, prepared by the joint efforts of representatives of both the pupils and the faculty. Besides placing responsibility and securing interest and support, the athletic council furnishes in a small way the very best kind of training in business methods and administration; the influence of membership in the council is most wholesome in the case of the naturally troublesome boy;

and it provides a natural channel through which a principal may learn and create sentiment. The council may well have as one of its functions the awarding of athletic honors, such as the school "letters;" and it should have the power to recommend many matters of policy to the association for final action. The author has found an organization like the one described the very best means of keeping closely in touch with the whole athletic situation.

There are a few very important and definite duties connected with the management of high-school athletics for which the principal alone must be held responsible. It is his duty to make sure that the rules of eligibility are strictly observed both in letter and in spirit. He can create such a sentiment in his school that it will be considered a serious breach of loyalty to the team and the school on the part of any athlete to lose his eligibility because of low grades or unsportsmanlike conduct; and social pressure is a powerful influence with adolescents.

The principal, too, can arrange for mass meetings just before important games; nearly all details should be planned by representative pupils; and these meetings can be made a strong unifying influence and a source of much wholesome school spirit and enthusiasm. To be effective the meetings must be carefully planned, the program consisting of school songs and songs written for the occasion, speaking by members of the team, coach, and others, and vigorous, well-directed cheering. One of the important by-products of such meetings is the ability in public speaking that the boys cultivate during their four years in high school. It is at these meetings that the principal and coaches can inculcate ideals of courtesy to the opposing team and school; the pupils must be made to feel that any exhibition of discourtesy on their part will bring more disgrace to the school than the defeat of their team. Very often it is well to arrange a mass meeting after a significant victory when

an opportunity is given to the school to express appreciation of the players and the coach.

The teachers, both men and women, have much to gain from the athletics of the school. It is difficult for those teachers who have entered sympathetically into the spirit of athletics and the excitement and the fascination which sway the student body to understand why any teacher who is working for and *living* with the pupils as boys and girls should forego the invigorating pleasure and increased influence that comes from being one in spirit with all this youthful enthusiasm. A teacher must be strong indeed who can afford to ignore this source of inspiration and influence.

Just a final word concerning the importance of the matters discussed in this chapter growing out of the demands and conditions imposed by our latest scientific, social, and industrial developments. (1) Because of modern knowledge relative to childhood and its needs, many adolescents are today in our schools that would formerly have died during babyhood; and these are naturally not the most robust. Although medical science has made wonderful progress in reducing the number of deaths due to zymotic diseases, the diseases of the nervous system are rapidly increasing. (2) Society in general has become so complex and so stimulating in its effects on the individual that the strain has increased more rapidly than any counteracting influences have been provided. (3) The conquest of nature and the accumulation of wealth have come to be the prime motives in modern civilization. (4) Many communities are looking to the junior and senior high schools to furnish vocational knowledge and training, which means that many of the smaller muscles and finer adjustments are called upon to function rather than the fundamental muscles, whose exercise is so closely related to health. Now, all educators are fully persuaded and they often assert that health is more important than any kind of knowledge or skill; yet many of the schools

have been discouragingly slow in adjusting their curriculums and their practice to the new conditions and the changed needs of the pupils. If the analysis of the functions of the various forms of high-school athletics given in this chapter is accurate, then it would appear that we have already developed in many places the natural and proper correctives for the unfavorable tendencies and influences of modern civilization and its demands. All that is necessary is to make our practice agree with our theory; give the big muscles of the trunk, legs, and arms plenty of vigorous exercise, bringing into action the lower nerve centers, thus securing the positive hygienic effects desired, as well as all the mental and moral qualities that are the natural outcome of properly managed team athletics. If this can be accomplished, a vital high-school problem will have found solution.

CHAPTER XVI

PUPIL FINANCE

The problem discussed in this chapter is one of some importance in all high schools and of much importance in the larger schools; its importance grows out of the opportunities for business training connected with the financing of the various pupil activities, and the possibilities for rather serious troubles when the business management of pupil organizations receives no attention from the faculty. Twice in the author's high-school experience, very embarrassing situations have arisen in connection with the handling of funds belonging to pupil organizations, due to neglect and lack of system; the plan here presented grew out of the need which these troubles made evident.

In Chapter VII, attention was called to the many subtile devices which modern society has developed and the many traps which modern commercialism has set for the on-coming generations of youth, all intended to cater to and take advantage of the peculiar nature of the adolescent. These snares and devices come in the form of public dances, movies, vaudeville, suggestive songs, emotional literature, pictures bordering on the obscene, and other stimuli that appeal to sex susceptibility. Modern society has been very skilful and modern commercialism has been very bold in the exploitation of adolescence. The boy who is just entering manhood naturally desires to "know all and do all befitting man's estate." Now, nearly every form of appeal that surrounds the adolescent makes an ever-increasing demand for his money, so that money soon comes to be the equivalent in his mind of the most fascinating social enjoyment; hence the desire to have and the temp-

tation to spend money become very powerful, especially with the boy in urban or suburban communities. Thus it comes about that the possession of indefinite amounts of money belonging to others gives rise to a serious and dangerous situation in the case of a boy with spirit. If he has reached middle adolescence, he is in the midst of his grand struggle for self-reliance; if he is well brought up, he wishes to be honest; but the inner allegiance is still very fickle, and he still feels strongly the pull of primitive impulses and hears the reverberation of the predatory life of the tribal and feudal ancestors whose psychic life he is recapitulating. It is not strange that statistics show that early and middle adolescence together constitute the period most prolific in the beginnings of crime. One-fifth to one-fourth of the several groups representing respectable people studied by E. J. Swift acknowledged that they had taken money or articles of value during their youth.

In the light of the foregoing, it is apparent that the average high-school pupil who handles funds for which there is no strict system of accounting is often tempted beyond what many adults are able to withstand. This is contrary to both sound psychology and sound pedagogy. Moral conduct should always be made easy, especially during the formative period, for the early stages of the process now under way constitute a real will-crisis. Then, too, on the positive side, there is offered in the financing of the various pupil activities a splendid opportunity for concrete business training that should not be neglected. The plan which follows proved very satisfactory in a suburban high school of five hundred pupils, where the amount of money involved ranged between two and three thousand dollars per year and the organizations included in the arrangement numbered about fifteen.

For the plan here recommended only two officers, in addition to the usual officers of the various organizations, are needed; these may be called "general accountant" and "general treas-

urer." It is best that these officers be members of the faculty, especially the general treasurer. The general accountant is provided with a small ledger, and each organization is assigned a page in the ledger. Besides the usual check book and pass book furnished by banks, the general treasurer is provided with a receipt book and a deposit book. The treasurers of the different organizations are furnished with uniform receipt books. The pupils are instructed not to pay any dues, initiation fees, or other money to any one without taking a receipt. The money received by the various treasurers is paid to the general treasurer and a receipt given by him every time a payment is made. Once or twice a week the money in the hands of the general treasurer is deposited in a bank and credited to the "student-activity fund;" at each time of deposit, the general treasurer enters in the deposit book the date of deposit and the amount that each organization has in the day's deposit. This completes the receiving part of the arrangement.

No money is paid out except by checks drawn by the general treasurer by order of the individual treasurers. The check-book stub shows, besides the date and the amount drawn, the name of the organization ordering the payment and the purpose for which the money was paid. Thus there are three records of all money paid out,—that of the treasurer whose funds are drawn upon, that of the general treasurer, and that of the bank.

At the end of each school month the general accountant compares the general treasurer's pass book and deposit book to see that they agree, and makes up his ledger from the check book and deposit book, thus showing the credit and debit sides of the account of each organization. The accountant's monthly report shows the amount received by the general treasurer from each organization, the amount paid out, and the balance on hand. Three copies of this report are made and signed by the general accountant and general treasurer; one

is sent to the school paper for publication, one is placed on the school bulletin board, and the other is printed in a local paper. Publicity is almost as important as competent accounting.

At the end of each semester the account books and receipt books of the various pupil-treasurers are taken to the office, and the accounts audited by a committee composed of a pupil, the general accountant, and the general treasurer. Of the report of this committee three copies are made, signed by the committee, and published in the same manner as the monthly reports of the general accountant.

As here described this plan may appear somewhat cumbersome and it may seem to involve some red-tape; but in actual practice such is not the case. The general treasurer has a little work to do nearly every day, receiving money, writing receipts and checks, and making deposits at the bank; but he is the only one involved in the scheme whose extra work is worthy of mention. However, the extra work which the plan imposes is very small compared with the troubles resulting from careless accounting or dishonesty that are pretty sure to come sooner or later. Although this plan was first worked out for the sole purpose of guarding against mistakes and dishonesty, the author is convinced that this, or something like it, has sufficient educational value to warrant all the extra work it brings to those concerned. Where it was tried, benefits and advantages grew out of it that no one had thought of, especially the publicity feature of the scheme. Frequently members of the various organizations came to the office to inquire into the purposes for which so much money had been spent during the month; the inquiry was always met by simply handing over the general treasurer's check book. No explanation is needed to show the wholesome effect of the interest thus aroused. It will be noted that no responsibility is taken from the pupils or their representatives (which would be a serious weakness), since the general treasurer does not pay out any

money without a written order from a pupil-treasurer. There is no feeling on the part of the pupils that they are being treated with doubt or suspicion, for it is simply an ordinary business arrangement, providing a system of checks and counter-checks between representatives of the pupils and of the faculty.

Nothing original or ingenious is claimed for this scheme; it is here given merely as an example of a little piece of school machinery that will aid the adolescents to keep right morally; for in the last analysis moral training is largely a matter of conditions.

CHAPTER XVII

ASSEMBLY

In nearly all languages there are certain satisfying words and phrases which are used to express the idea of unity of spirit or purpose. The French effectively express this idea of mutual interest and sense of unity among the individuals of a group when they say, *esprit de corps*. These various forms of expression are satisfying because they describe a mental and moral condition much desired. When there is unity of spirit, the individual grows more effective because he becomes more than an individual; he is a member of a body all parts of which are inspired by a common purpose; as such, he is raised above his own individual self; and he gains new enthusiasm, hope, and confidence. Military leaders have always placed high value on the morale of their armies. During recent years the modern high school has learned the value of *esprit de corps*. We know that the success of the school as a whole is largely determined by the unity of spirit and effort which pervades the student body; and the social and moral welfare of the individual pupil is more dependent upon the harmony of influences resulting from a real *esprit de corps* than is generally realized. As Dr. Bagley expresses it, "social stability demands a certain likemindedness,—or, better, a rather complete resemblance among individuals in respect of dominant conduct-controls." The likemindedness of the group results in social stability, because it adds wonderfully to all the satisfying and stimulating influences; the various pressures of the social atmosphere become at once bracing and quieting. This is true in general whenever human beings come together for a

common purpose; but, because of the rapidly dawning social instincts, adolescents are extremely eager to be one in spirit and unitedly to serve a common cause. Without this privilege, they are likely to be turbulent; and the highest opportunity for training in loyalty is lost.

There is doubtless little difference of opinion with respect to the foregoing statements. The whole problem is, how can this desirable unity of spirit and purpose be secured? In general it will be agreed that this sense of unity, if present, is likely to have its origin in some one with a definite and consistent purpose in mind, whose influence is sufficient to control the social forces at work. As the American high school is at present organized and administered, this function belongs primarily to the principal; and the successful principal makes use of very many means of unifying his school. This is fundamental in the solution of high-school problems, as the reader has frequently been reminded. But there is one means which is not really appreciated by many principals; only a few seem to make full use of the school assembly for this purpose; this appears evident both from the nature of the exercises and from the subordinate place that the general assembly seems to occupy in directing the conduct and efforts of the student body. It is with this idea in mind that this short chapter is given a place in these discussions of high-school problems.

If the possibilities of the school assembly are as great as is here implied, what happens at this time is worthy of considerable thought and effort on the part of many connected with the school. It will be understood that the following discussion is intended to be merely suggestive; as always, conditions and available means must determine procedure. The purpose of the chapter will be accomplished if it stimulates or directs thought and effort in the direction indicated.

There are three qualities that, from the standpoint of the pupils, should characterize the programs of the school assem-

bly; they should be interesting, instructive, and inspiring. (1) The first quality must always obtain; we must never be satisfied with giving the pupils something "they ought to enjoy." Unless the exercises are interesting and pleasant from the pupils' point of view, the whole affair is an imposition; we take an unfair advantage when, by reason of our authority, we force pupils to give attention to a program that does not meet their real interests. With this first and most important quality we should, as far as possible, unite one or both of the other two. (2) It is easy to provide program material that is instructive; but much thought and sympathetic effort are required to furnish material that is instructive to young people of high-school age. We must beware of giving the pupils something that "they ought to know." Here again we are in danger of imposing our adult ideas. (3) If we judge from the testimony that has been collected by several students of high-school ideals and interests, it would seem that in after years the thing that is cherished with greatest gratitude by former pupils is the inspiration that they received from their teachers and others connected with their high-school life. If some one can be found who is able to bring an inspiring message to the pupils during the general assembly period, nothing better can be done for the individual pupils and the school as a whole; but unfortunately those who are able to do this are few in number and not often available. If these three aims — interest, instruction, and inspiration — are always realized at least in part, the assembling of the school will be looked forward to with pleasure, and the school life will be enriched to the degree that these aims are realized.

To make certain that the general exercise period is pleasing, instructive, and inspiring, there are a few things that must be avoided. It should always be kept in mind by those responsible that it is not a time to say unpleasant things. This means that we must not yield to the temptation to discuss frequently

matters of discipline or to point out the faults and shortcomings of the pupils. For this view there are at least two reasons: (1) It will seldom accomplish the thing aimed at, since bad conduct is too personal a matter to be treated successfully in mass or in public; and (2) talk concerning pupils' shortcomings is not pleasing, instructive, or inspiring, as it violates a fundamental principle of pedagogy in that it emphasizes the wrong thing. Usually the one who yields to the temptation to say ill-natured and unpleasant things in public is fully persuaded that he is doing so for the good of his hearers; he believes he is "telling them the truth and saying things that they ought to know;" whereas a more complete analysis of the case would show that he is merely relieving his own feelings on a matter that is disturbing his peace of mind. At best this unpleasant practice is an imposition upon a great majority of the pupils, that part of the school, too, that is entitled to the most deference; for the adverse criticism to which expression is given usually applies to a comparatively small number, unless some one besides the pupils is at fault or inefficient. Again, unless care is exercised to exclude fault-finding and seeming irritability, there is danger of the pupils' coming to feel that school is not a pleasant place to be; because what is done in public and by those in authority naturally does much to determine the tone of the entire institution, whatever the institution may be. Further, frequent reprimanding, like any other form of irritation, tends to produce a calloused condition and thus to defeat its own ends because of the resulting lack of sensitiveness.

In our efforts to make the general exercise period instructive, there is danger of adding another working period to the school day; this is another thing to be avoided. But, if the programs really make a strong appeal to the interests and needs of the pupils, they will not be felt burdensome. The more substantial and thought-provoking the subject presented, the more skill

will be needed in treating it. Heavy subjects will not be burdensome when treated concretely and made to touch the lives of the pupils.

In every community there are people who will wish to exploit the high-school pupils; the motive may be either selfishness or merely devotion to some pet scheme or hobby on the part of the one who seeks a hearing. This again is something to be guarded against if the pupils are not to be imposed upon. Requests for an opportunity to address the school are usually made in such a manner and by such persons that it is somewhat difficult to refuse. Yet in the interest of the pupils, which is the only interest to be considered in this case, whatever is undertaken during the assembly period must meet one or more of the aims mentioned above.

The reader will readily agree that the programs ought to be interesting, instructive, or inspiring from the viewpoint of the pupils; yet in many schools the simplest and most direct method of realizing these aims is not employed. Very often the assumption seems to be that the assembly period belongs solely to the principal, and that he alone knows what is needed; or, when there is a little less prevalence of the monarchical idea of managing matters, a committee of teachers has charge of the programs. In either case the assumption is that some one besides the pupils knows better than the pupils what will meet their interests and needs. It must be clear that all of the foregoing discussion tends to but one conclusion; and that is, that the general exercises of the school should be a social affair. In other words, some way should be found to capitalize all the best ideas of the pupils and the teachers and make use of all the available talent of both the school and the community.

As to how this will be brought about will depend upon the size of the school and many other conditions; a great variety of plans have been used to secure the desired results; but in

all schemes the principle of coöperation is fundamental, the coöperation of all departments and all elements of the school. This is the only way to make sure that the interests and needs of the pupils are all known and met; and it is necessary to the development of a "social conscience" and to making certain that the individuals "participate in the social conscience." In the published accounts of coöperative schemes, the best practice seems to place the responsibility for the assembly programs in the hands of a committee composed of pupils and at least one member of the faculty. Sometimes the committee is permanent, and in some cases the committee in charge is a changing body. The most important considerations to bear in mind are that the pupil members of the committee must be pupils that know pretty definitely what the school really wants and that nothing interests and pleases a school so much as performances by its own members. The literature of the subject contains reports of marked success where the work is in the hands of some sort of a representative committee, and this seems to be the best way to manage. However, the author has been able to realize the aims and accomplish some of the purposes of the school assembly by what appears a less systematic way of managing. He has found it convenient and satisfactory to invite the various organizations and classes each to assume the responsibility of preparing and carrying out a program. This sort of a plan may easily include special programs for special days, such as, national holidays and anniversaries of great events. The scheme here suggested usually gives rise to wholesome emulation on the part of those who do the work. Either this or the committee plan is likely to secure the services of all the special talent of the school. It is scarcely necessary to say that this coöperation between pupils and teachers does not abrogate any faculty authority.

The following arrangement was used several semesters in one school. On Mondays the principal addressed the school,

and attempted to interest the pupils in a great variety of topics, including an interpretation of events and people of current interest, literature, art, travel, and topics that might be classed as the philosophy of living. Tuesdays some one outside of the school was invited to speak to the pupils. The speakers were men and women from every walk of life, and they discussed a great variety of topics. Wednesdays one of the older pupils spoke before the school or provided a program; these mornings nearly always brought matters of much interest and were anticipated with pleasure by the school. Thursdays one of the teachers either addressed the school or arranged a program. The Friday programs consisted of music furnished either by outside talent or by the school. This arrangement brings about the greatest possible variety in the programs and makes a rather satisfactory distribution of responsibility.

Probably the school assembly proves of greatest educative value when there is a real issue and something to be done for which sentiment must be created; in this case results are obtained by focusing attention on what is needed and arousing interest and enthusiasm for the undertaking. This can be so managed as to give the pupils the very best training in initiative and real experience in public speaking. No critic of high-school debating is able to find anything artificial or stilted in the discussions which naturally accompany the consideration of any enterprise undertaken by the pupils, especially if the enterprise is vital to the welfare of the school or the community. Any school that did not make use of the assembly period for the purpose of initiating and promoting the many worthy causes and the various "drives" during the great war certainly failed to realize its resources to the full, and neglected a splendid opportunity for training in coöperative effort. The experiences that our country was passing through were always rich in worthy and appealing motives; the high-school boys and girls were always pleased to plan and execute any piece of

war service that was suggested to them; and after they caught the notion that they could really have a part in the great world events, they were fertile in ideas and effective in execution. In the present writer's experience one carefully planned program was usually sufficient to initiate a successful campaign of war service. It was easy to develop a wonderfully interesting and effective interplay of responsibility between the pupils and the faculty; by means of real teamwork strong programs were planned, and the programs stimulated voluntary effort and coöperation to a degree that nothing else would. The war has passed; but there are always worthy and real motives at hand. Both faculty and pupils should continually have under consideration many more school enterprises than can actually be carried out. The assembly period is the natural time to learn of any of these enterprises that demand concerted action.

The following activities are illustrative of what one high school undertook at assembly during the past year: a discussion by the pupils of the advisability of resuming athletic relations with a neighboring high school with which these relations had been severed, presentation and acceptance by the pupils of memorials and gifts to the school, arousing enthusiasm for coming athletic and literary contests with other schools, honoring successful athletes and debaters, presentation of the school's athletic and literary "letters" at the end of each season, the organizing and carrying out of a mock political convention, advertising class plays by the members of the cast, launching a thrift movement, practicing school songs and school yells, purchasing a United States flag for the school, discussion of the advisability of new organizations, and the discussion of many other matters of general interest to the school.

Besides these specific things that are given an assembly period for their consideration, there is usually considerable business connected with the management of the school that

must have prompt attention, and the assembly serves as a sort of a clearing house for the transaction of this business.

The school assembly is the natural place to teach the pupils proper conduct at public gatherings, something that is greatly needed in many communities. There is a rather definite "social criterion of conduct," which they must learn and habitually observe if they are to be socially efficient. If pupils leave high school without the ideals of social behavior pretty well crystallized, their conduct on public occasions is likely to be such as to cause them to be misjudged, by unconsciously subjecting themselves to criticism.

The practice with regard to the time for holding general exercises seems to vary greatly. If the time of beginning school work in the morning and other conditions are favorable, there would appear to be many reasons for opening school with an assembly. In many places where this is not practicable, it is the custom to assemble the school about the middle of the forenoon; and there are a number of schools that begin the afternoon session with general exercises. But the matter of time is not as important as the other considerations. It is of consequence, however, that every one connected with the school should attend, and good form demands promptness on the part of all. The length of the regular assembly period seems to vary from ten to thirty minutes. If the school meets every day or three times per week, half an hour is too long, whereas ten minutes is not sufficient to accomplish many things that ought to be undertaken.

This chapter has attempted the following: to emphasize the importance of developing *esprit de corps* in high schools and to show that the school assembly may serve as a unifying influence; to make clear the necessity of interesting, instructive, and inspiring programs in order to secure the desired results; to point out a few things that should be avoided if we are to realize the three qualities named above; to enforce the idea that

the assembly period, like nearly every school activity, belongs to the pupils, and that their coöperation is positively necessary; and to give a few concrete illustrations of what schools have accomplished.

CHAPTER XVIII

SEX EDUCATION

The subject discussed in this chapter is both difficult and delicate,—difficult because it deals with matters concerning which there is at present considerable difference of opinion, and delicate because the propagation of wrong ideas in this field involves consequences momentous in their bearing on both individual and social life. In fact the whole movement of sex education has been seriously questioned. But a book dealing with problems of social administration in secondary education that makes adolescence its point of departure and attempts to solve these problems in the light of our latest knowledge concerning the psychology of youth cannot logically omit a consideration of the functions and hygiene of sex; for, as has been shown, the appearance and development of these functions are the central and causal factors in all that occurs during the period of adolescence; they are the basis of the marvelous mental and social development which is due at this time. Either perversion or arrest of the sex instincts leads to disastrous results, the extent of the disaster depending upon the degree of perversion or arrest. The plane of the individual life as a whole cannot be above the plane of the sex life.

The purpose of the following discussions is to establish a wholesome viewpoint and make suggestions concerning matter and methods of instruction. These discussions should be of interest to high-school teachers, athletic directors, and parents. This chapter does not undertake to furnish knowledge concerning sexual subjects; this is readily obtained from the many reliable books and pamphlets that have appeared recently.

Both scientists and physicians of authority have done good work in presenting the needed information in a simple and scientific way. It is hoped, too, that the present treatment of the subject will make clear its importance and suggest a duty to those responsible for the welfare of adolescents.

Notwithstanding the strong convictions which many social workers of international fame and other well-informed and thoughtful people now have in favor of a vigorous campaign of sex instruction, it must be borne in mind that there are grave dangers involved in teaching young people all the facts they need to guide them safely through the strong and choppy currents of adolescence. The following are some of the possible causes of danger: the immature age of the boys and girls at the time the instruction must begin in order to forestall with certainty serious mistakes on their part; previous false notions concerning sex and wrong attitudes toward the subject, due to the vulgar sources of information; the arousing of a morbid curiosity with regard to perfectly normal matters; thinking about personal conditions and functions which ought to be kept out of the mind as much as possible; forcing attention upon abnormal and repulsive acts, habits, and conditions; and the unfortunate reaction of parents and the community, due to false ideas concerning the whole subject.

It is believed that the dangers due to immaturity can be guarded against by carefully selecting only the facts that are needed in early adolescence and by a skilful and sympathetic presentation; this is the testimony of many that have had experience. The difficulty arising from previous false ideas and standards can be overcome by a serious and scientific handling of the subject by a mature and highly respected person. Morbid curiosity and brooding over matters of sex often result from partial or inaccurate information; it is often a case where the truth makes the recipient whole. In one respect the natural functioning of the sex organs and instincts is like digestion;

in order to be most natural and healthful little attention must be given it. In both cases the skilful teacher gives the essential facts in a frank full way, then dismisses them from thought as completely as possible. The abnormal and repulsive aspects of the subjects which must be included should be kept in the background by placing the emphasis on the normal and health-giving phases of the subject. It has been found that the attitude of parents and the community toward sex instruction is determined largely by the way the children feel about it and the actual results obtained; that is, if the work is successful judged from the standpoint of the pupils, no serious criticism need be feared. Although the present writer believes in the urgent need of sex education and seems to have been successful in directing it, he does not wish to be responsible for any reader undertaking the work; much depends upon conditions, and the knowledge, skill, and personality of the teacher. As in the case of introducing social dancing, the one undertaking it should be moved by a strong conviction and assume full responsibility. However, it is hoped that the approach to the subject here recommended and the suggestions concerning methods and the timing of the various phases of the subject will aid in making the undertaking not only helpful but safe for all concerned.

The dangers and difficulties incident to sex instruction are not likely to appear if the emphasis is continually placed on the natural, positive, health-producing, soul-inspiring life-processes involved in the maturing of sex; that is, fixing and maintaining the proper viewpoint will do much toward insuring success; for nearly all the troubles and dangers incident to sex development are due to false perspectives. The adolescent must understand and feel the marvelous new powers and the richness of personality that are now his inheritance if nature is allowed to do its work; as Hall says, nature now "plays upon the soul with its rich orchestra of influences." The

one who attempts to instruct high-school pupils in matters pertaining to sex, if the instruction is to be helpful and avoid the dangers referred to, must keep constantly before him the ideal of wholesome and vigorous living and growing. The youth must be filled with enthusiasm for a clean, vigorous body. He must in some way be impressed with the scientific truth that the dawning of the sex instincts and impulses, which are the most powerful of all, makes possible the upbuilding of all the beautiful traits of character that we call manly and womanly, that the rôle of sex is normal, fundamental, stimulating, and uplifting, hence the most important natural influence for power and good that ever comes to the individual. †

To make sure that all the beneficent physical, mental, and social influences which belong to this period are operative, there are a few scientific facts that must in due time be impressed upon both boys and girls. Most important on the side of physical influences is the stimulating and constructive influence of the internal secretions of the more important sex glands, which cannot be perverted without disturbing and unfavorable results; on the side of mental influence is the health-giving and energy-producing effect of pure thinking. From these two benign causes there come to the adolescent the vigor, the charm, the spirit, and the beauty that are peculiar to this period of human development; to miss these is to miss youth with its unique joys and aspirations. The "voices and visions" and "celestial messengers" of which the poets of youth tell us come most surely to those who keep sacred the laws of nature. This viewpoint of the subject and this way of emphasizing the instruction should do much toward anticipating and preventing the difficulties and dangers incident to dealing with this delicate subject.

Very important, also, to the success of the instruction in matters of sex is the method of approach; it is vital that the subject, as well as all the important facts involved, should be

given its true scientific setting. This will add force to the instruction and aid in removing any self-consciousness or morbid curiosity that might lurk in the minds of the pupils. The scientific approach and setting for all constructive sex education are naturally supplied by the biological sciences. The most successful instruction with which the author has had experience began by making clear the logical place of reproduction among the other life-processes; the natural order seems to be, digestion, circulation, assimilation, excretion, respiration, reproduction, and sensation. Thus a complete course in biology logically includes a study of reproduction, which is the ultimate consideration in sex education. Much of the instruction preparatory to sexual knowledge had better be incidental. The approach is easily made by means of a review of the essential organs and functions in plant reproduction; this supplies a simple scientific vocabulary, and it is very important that the terms of this vocabulary should always be used instead of the vulgar terms with which the pupils, especially the boys, are pretty sure to be familiar. The next step is a study of the various forms of reproduction in the lower forms of animal life; then the reproductive function in higher forms, ending with mammals, includes practically all the essential facts required as a basis of a sound and scientific study of the human development of sex. This gradual approach and the supplying of this scientific background robs the subject of its mystery and gives it a wholesome place in the mind of the pupil beside the other interesting facts concerning the processes of life; the aim is to give the pupil's ideas concerning sex their true biological place.

The above aims and ideals will be realized with more certainty if the various phases of the subject are properly timed. There are many of the simple facts concerning the origin of beings and the difference between the sexes that the child should get in the home long before preadolescence; and there is another

important body of information that should be imparted on the threshold of puberty. Although there are usually no significant conscious sex impulses before the time of puberty, there is naturally much active interest in the matter of sex; so the whole problem is to direct this spontaneous interest into wholesome channels. In general it is highly advantageous that the essential facts and considerations respecting sex be instilled into the youthful mind before they have taken on the emotional garb; this will aid greatly in keeping the attitude of the learner strictly scientific. Since all emotions have an instinctive basis, this means that much instruction must be given before the appearance of the powerful instincts; this is not only in the interest of a scientific, matter-of-fact reception of the instruction, but is necessary to the safety of the individual pupils. As some one has said, "better a year too early than an hour too late" in these vital matters.

Suggestions with regard to the age best suited to the various phases of sex instruction imply an accurate knowledge on the part of the instructor, whether parent or teacher, respecting the on-coming of the various stages in adolescent development. The problem is considerably complicated, so far as group teaching is concerned, by reason of the great variability in the time of maturing, as noted in our study of adolescence, due to individual differences, health, race, and social status. It will be remembered that studies made thus far on the age of sex maturity indicate that the largest number of boys mature between the ages of thirteen and fourteen and a half, and girls between twelve and thirteen. But for practical purposes it is more important to note that the maturing period for American boys varies from eleven and a half to sixteen and a half, and American girls from ten and a half to fifteen and a half (King); this may be thought of as a sort of normal variation, extreme cases of early and late maturing occurring occasionally outside of the periods here given.

The following suggestions relative to the age best suited to introduce boys and girls to the various phases of sex education are given with much hesitancy; for there is not yet accumulated a sufficient body of experience to warrant any dogmatic statements, and the experts who have attacked this aspect of the problem are not fully agreed.

Taking all available data into consideration, it would seem that during the period of preadolescence, when the barbaric characteristics of the human race are most manifest, when the average boy especially exhibits more proclivities toward vulgarity than at any other time, there should be a rather limited amount of direct teaching; however, there may well be much indirect instruction connected with nature study, plant breeding, and health. The minds of boys and girls at this age should be free from the subject of sex as much of the time as possible; this can be brought about more surely if their natural curiosity concerning a few matters has been satisfied; and this is their natural right, and lays a proper foundation for their complete sex education.

We may be sure that the preadolescent, especially the boy, will get the desired information and explanations somehow; and, because of the sources, the information he gets is nearly always false and usually colored in most unwholesome ways. To the question as to who gave them their first information concerning the subject of sex, Dr. M. J. Exner received answers from 676 college men; he classified 617 of the sources as bad 57 as good. Among the former were boy associates 544, girl associates 33, hired men 22, stories and talk 9; among the good sources were parents and relatives 27, brothers 14, teachers 3, and lecturers 3. Of these 676 college men "91.5 per cent received their first permanent impressions about sex from unwholesome sources." Certainly there will be much less liability to harmful results when the preadolescent is given the information which his curiosity craves in a natural, frank,

open manner by some one that he respects and trusts. This information will tend to dispel the mystery which so often surrounds the subject and thus aid in keeping the mind free from thoughts concerning it. Dr. Exner says that it is only by reading the answers to his questionnaires that one can get the tremendous force of the figures which he has compiled; he is certain that "these sources of early sex information have distorted the whole question, poisoned the mind and imagination, sensualized the whole atmosphere of the life, led to destructive sex habits, and caused untold mental misery."

There can be no doubt that the natural teacher at this time for the boy is his father, and for the girl, her mother. But both observation and the studies that have been made similar to those of Dr. Exner indicate that a very small per cent of children get their information concerning sex from their parents. According to a statement based on the answers to Dr. Exner's questions and issued by the United States Public Health Service, only four per cent of 677 college men secured their first information relative to matters of sex from their parents. Other studies show that boys are more successful than girls in getting information of some kind concerning these matters; and, on the other hand, it has been found that mothers are generally more thoughtful for the welfare of their daughters than fathers for the safety of their sons.

An easy-going ignorance or carelessness concerning results, or a lack of courage accounts for the shameful shortcomings of parents; hence in most cases the only safe source of information at present for a great majority of American children is some skilful, conscientious teacher in the public school. It is hoped that this is only a transition period, and that soon parents will be sufficiently informed and willing to undertake this important work with their children. Of one thing we may be certain: the preadolescent will know. The only question is, who shall inform him? It is much more important who shall teach him

than how much he shall be taught, the topic now to be discussed. At the end of the period under consideration, that is, on the threshold of adolescence, some one with adequate knowledge, skill, and conviction should come forward and furnish information on at least the following subjects.

First and most fundamental, both boys and girls should be informed respecting the new life upon which they are to enter; and especially should they be made to realize the great possibilities for personal development in all things that make for health, mental vigor, and the richer and finer elements of character. They must be made to understand that all of the more distinctly human and desirable powers and traits will now come to them in a perfectly natural way, providing the laws of their development are not perverted or in any way interfered with. This instruction should include scientific information with regard to the value and significance of sex in later life, some of the simpler and more fundamental facts concerning reproduction, and the relation between these and proper living. If it can be done tactfully, there should be intimations relative to the new thoughts and feelings characteristic of the period and the dangers incident thereto; because the instincts and impulses are so powerful, they are not only all important but also dangerous. Adolescents should be made to appreciate that self-control is at all times one of the most valuable assets in life and that it is now vitally connected with the fullest development of all the desirable manly and womanly qualities.

It is believed by those who have given much thought to sex education, that, on the physical side, a pretty definite knowledge concerning internal secretions (scientifically called hormones) and their functions is needed to furnish a scientific basis for much practical instruction; the thinking on the part of adolescents that is likely to result from this knowledge cannot be other than wholesome, because of the appeal that it makes to their natural desire for personal efficiency and charm. The

instruction concerning the internal secretions of the sex glands should always follow the study of secretion in general. For the present purpose it seems best to classify secretions as external (saliva, perspiration, gastric juice), internal (from the thyroid glands and the adrenal bodies), and both external and internal (from the liver, pancreas, testicles, and ovaries). When pupils realize the marvelously powerful and subtle influence of many of the internal secretions of the body, they are prepared to understand and properly evaluate the subtle and potent influence of the internal secretions of the sex glands, for this knowledge follows as a natural corollary of the whole subject of internal secretions in general. The teaching of this subject can easily be reinforced on the practical side by analogies drawn from some of the animals with which the pupils are familiar. It must be definitely understood that the great wealth of vigor, endurance, charm, and the finer spiritual qualities which are due at this time is strictly conditioned upon the full and natural internal functioning of these glands, whose maturing is the central fact of all the changes that we include under the comprehensive term adolescence. It must be brought home to the boy in some effective manner that his hard muscles, which defy the blow of his opponent in boxing, his fiery eye, which signifies spirit and inspires confidence, his undaunted courage, which shines forth on the athletic field and always makes a real force to be reckoned with, and all the virile qualities, which belong to man's estate are definitely and surely conditioned by the proper functioning of the sex glands; the girl must be made to realize that her new beauty of contour, her increased charms, her vivacity, her subtle power over those of the other sex, her abounding resourcefulness, and her splendid womanly traits, are all the direct and natural result of the sudden and vigorous awakening of these important glands; and to make sure of these beneficent effects, both must understand that the blood cannot in any way be deprived of

the secretions. This knowledge is necessary to make clear the constructive possibilities of adolescence and to furnish a scientific basis for a safe physical and mental regimen; the definite warnings that should now be sounded get their meaning and force from a clear understanding of the functions of the internal secretions.

There are a few other facts connected with the development of a normal boy at this time that he should know, otherwise he does not get "a square deal." If he is to be guarded against unnecessary worry, and possibly against contemptible quacks who are scheming to profit by his ignorance, he must be given clear and carefully conveyed information concerning nocturnal, diurnal, and involuntary emissions; and he should know the relation of diet, exercise, and habits of thought to these phenomena. Several writers insist that boys at this age should be definitely warned against unscrupulous doctors. There can be no doubt about the wisdom of giving every boy a clear statement with regard to habits that he is in danger of falling into and of their natural consequences; however, much care should be exercised not to dwell on such subjects or give an exaggerated account of the consequences. For the intelligent boy, accurate knowledge with respect to internal secretions is full of wholesome suggestions on this point, furnishing him with scientific reasons for proper conduct. The sympathetic and persuasive teacher can greatly aid the boy in his struggles with himself by impressing upon him the significant and sustaining influence of purity of thought and ideals. Repressed feelings and impulses are not necessarily killed; life must be filled with healthy activities and ideals in order to be safe and strong and clean.

Girls, too, at this time are entitled to careful instruction as to their developing nature and needs. This should of course be given by their mothers; however, if the mothers are remiss in this important matter, then the duty seems to fall to some

kind woman teacher whom the girls respect and trust. They should in all fairness have previous information relative to the new physical phenomenon that comes at this stage in their development and the care of themselves in connection thereto. Their teacher of physiology should always be a woman, and she should give them sufficient instruction concerning the anatomy and location of the internal sex organs to make clear the relation of proper dressing and exercise to the welfare of these organs and their health. It is also greatly to be desired that forceful and sympathetic friends will join mothers in helping the girls to build high ideals of modesty and reserve; this is a matter of personal influence, calling for supreme tact and deep interest on the part of those who undertake this kindly mission.

There are other very important matters concerning which boys should early get correct and convincing information, unpleasant as these topics may be for discussion. At about the beginning of middle adolescence, normally at about fifteen, boys should be taught the scientifically established facts relative to the three sexual diseases and the direful individual and social consequences. The teaching concerning this matter, although conservative, must be given in no uncertain terms; for, if young men do not direct their steps during the next few years with eyes wide open, some one is shamefully to blame; the pathetic and horrible consequences of wrongdoing are so far-reaching and involve the innocent and unsuspecting to such an extent that duty in this matter is clear and imperative. It is well, too, that the false notion which the youth often gets concerning "sexual necessity" should be forestalled by giving him the findings of science. Let us also hope that there will always be at hand some one with courage and influence to deal a death blow, on fitting occasions, to the ancient and unfair idea of the double standard of morality.

In addition to what is suggested above, it may be said that

many scientists and social reformers are fully persuaded that all young people should be informed touching the latest knowledge available on the subject of eugenics. If modern eugenics is to be taught, the teaching will be more effective if delayed until the beginning of late adolescence; this delay is in the interest of more mature handling of the subject and the principle of supplying information when it is likely to be needed.

A slight insight into adolescent nature is sufficient to make evident that mere knowledge, however accurate and complete, relative to the matters under consideration in this chapter is not enough to insure right conduct. Scientific knowledge furnishes only the foundation. As has already been intimated, there must be the sanest kind of teaching with respect to moral standards, a toning up of the will, and an appeal, in the case of boys, to their chivalry and altruism. It must be kept in mind at this point that "preaching" will not be effective in dealing with the adolescent; he must be skilfully led into wholesome lines of thought, and he must be encouraged to give full play to his good impulses rather than trust to checking the bad impulses. The principles developed in the next chapter should supplement what is said here.

In the preceding discussions of the subjects to be taught and their order and time of introduction, the emphasis has been continually placed on the positive aspects of the problem, the only exception being the teaching concerning the sexual diseases. This is an application of the principle which the author believes is fundamental in dealing with adolescents, a principle imposed by the very nature of adolescence; that is, that *all* efforts on behalf of adolescents must be positive and constructive rather than negative and critical. It assumes that at this time we have a great and wonder-working force that must have scope and guidance rather than suppression and restraint; and that sex development is the dynamics of adolescence. Thus everything must be done to give the evolution of sex its normal

place in the scheme of human development. It must be understood that the sex instincts as such are neither good nor bad; all depends upon the way they are made to function; for these instincts reach down into the most primitive soil of human nature and they flower in the highest human qualities, true idealism appearing only with the unfolding of sex into consciousness. When properly understood, sex life and reproduction takes on a sacredness peculiar to any subject of momentous importance to the physical and moral welfare of human beings. It must be raised from all its vulgar and repulsive associations to its normal place as the source and impelling motive of nearly all the social virtues as well as the many human qualities which attract and charm.

On the pedagogical side, sex education is a problem of method and spirit. The silent treatment which the subject has received, together with the perverted notions which have grown up and the low associations which have surrounded it, has made the matter of method and mode of approach of very great importance, consequently demanding thoughtful consideration and skill in handling; and nearly all recent writers and students of the subject agree with Dr. Winfield S. Hall of Northwestern University that "the only rational cure for the present social conditions is to be found in education." It is encouraging to note that Dr. Exner's study, before referred to, leads him to believe that there is a "rapidly growing interest in sex education on the part of high-school authorities and teachers." About 18 per cent of the 761 college students giving information as to the source of their sex instruction mention their high school. Dr. Exner further concludes from his study that education is "a reconstructive, redirecting force after the sex instinct has been allowed to become seriously misdirected, as well as serving to keep this instinct in normal channels from childhood up."

The following suggestions with regard to sex instruction are

based on the experience of the author and many others, and they seem to be in accord with the latest teachings of adolescent psychology.

(1) So far as interest is concerned, the teacher can depend largely upon the natural interest and curiosity of young people in any subject that touches life in general and especially that affects their own personal interests and welfare. The successful teacher will take advantage of this natural curiosity, guide it into wholesome channels, and keep it from becoming morbid and disquieting. This can best be done by a simple, matter-of-fact, scientific presentation; an unembarrassed and matter-of-course manner on the part of the teacher will tend to allay any mysterious or unwholesome notions that may disturb the pupils.

(2) In the treatment of all sex subjects with adolescents the teacher will do well to keep in mind the significance of the new birth to the individual, its influence on his thinking, sympathies, and ambitions, as well as on his passions and emotions. The awakening of the new power to reason suggests that one of its functions is to supersede and control the instincts and check the impulses. Any teaching at this time that does not make the most of the budding ideals and the deepening convictions and the new altruism falls far short of its possibilities; psychic evolution must be made to react helpfully on the vigorous biological developments that are in progress. These suggestions apply especially to the latter part of middle adolescence. The dictum of the new education, "Youth is the golden age of life," is just as suggestive in connection with sex education as it is when lighting any other dark spot in the field of secondary education. Dr. Winfield S. Hall, one of the highest authorities on this matter, says: "In the presentation of no subject does the teacher require a greater knowledge and insight into the psychology of youth than is required in the teaching of sex hygiene."

(3) Although it is not necessary to teach a great amount of botany or zoölogy, the teaching concerning sex should be based on a broad knowledge of biology; much of the instruction may well be given as illustrative of important biological principles; that is, much of the instruction can be made more impressive and at the same time kept clear of undesirable suggestiveness if it is made incidental to other teaching or incorporated in regular lessons in biology and physiology. In other words, nearly all the instruction may be given as completing the pupils' knowledge of nature and nature's methods. If these suggestions are sound, it follows that (a) sex education is not to be added as a new subject for study, and that (b) part of the teacher's equipment is a firm grasp of biological principles and a practical knowledge of human physiology and hygiene.

(4) The language in which the information is conveyed should be carefully chosen and always scientific; the term "sex education" and the like will of course be avoided, as this would tend to give the whole matter a place apart in the pupil's thinking, whereas the aim is to incorporate it with his body of general scientific knowledge. Much of the instruction can be given as informal talks which occur in their proper scientific setting. The lesson should close with other than sex topics, so that the pupils will leave the classroom thinking and talking about other things and thus be relieved of possible embarrassment. The thoughtful teacher will not use language or deal with topics that tend to suggest sensual imagery. It will be remembered, too, that, contrary to our aim in general education to teach in such a way as to stimulate further thought and investigation, we must try to satisfy curiosity completely and thus lessen the danger of brooding over matters of sex. It is best not to ask pupils to discuss any sex topics before the class; but they should be encouraged to ask questions in writing, some of which will be answered before the class, while a few may best be discussed privately. The morbid

and pathological aspects of the subject must never be emphasized with high-school pupils. The teacher will always guard carefully the self-respect of every pupil in the group.

Social workers and other thoughtful people who have contact with the actual problems of individual and social welfare are united in their opinion that the only rational hope for a real and important forward movement of the human race at present is sex education; this gives great importance to the question, "on whom shall rest the responsibility for the instruction?" In the foregoing discussion it has been assumed that the public-school teachers are the ones best qualified for this delicate work; this is the opinion of nearly all who have expressed themselves publicly. There can be no doubt that logically the mother should instruct her daughter and the father his son; but all the statistics that we have thus far prove that this happens in a comparatively small number of families. In their replies to Dr. Exner, "many men expressed much bitterness against their parents for having failed them in this respect." This has forced the conclusion that teachers must represent the parents and act for them in this matter until a generation of parents has been properly prepared for their duty. It is thought that we are entering "a transitional period of two or three decades" during which "the great truths of life must be taught by the schools"; after this it is hoped the parents will come into their own; such would be an ideal outcome of the new movement.

By training, the teachers of the biological sciences, as already intimated, should be best fitted for this work; nearly all the facts to be taught lie in this field of knowledge. But, by reason of his position, there is no one connected with the modern high school that is as likely to be practically effective as the director of physical education; this is especially true concerning those in charge of the boys on the various teams. The athletic coach, if fitted for the work, is in a position to do much

incidental and effective teaching relative to matters of sex; because of the nature of his work, he is in closer touch with the boys than are the other members of the faculty, and can speak with more persuasive authority on the relation between right living and success; and the coach can hold before his players a motive to right conduct that is likely to make a powerful appeal. Then, too, the vigorous training that he demands of his boys greatly aids in reducing the sex strain and makes right conduct much easier for the adolescent. Whoever may undertake the work, the most important qualifications, as in other cases where personal influence determines, are a strong and pleasing personality, tact, and an overpowering conviction concerning its vital import. Right conduct is the ultimate aim, and this is most likely to be realized through a strong personal appeal.

CHAPTER XIX

MORAL EDUCATION

It is entirely fitting and perfectly logical, that, in the discussion of adolescent problems, a chapter on "Sex Education" should be followed by a consideration of the problem of moral education. Many times in the preceding chapters the close and causal connection between sex development and the other adolescent characteristics has been noted; and it has been pointed out that many of the impulses and traits which appear at this time are, when scientifically considered, really secondary sex characters. The best authorities on the subject are agreed that a very large part of the prevalent personal, domestic, and social wrong-living and immorality has its origin in sex or some of its manifestations; and they are also agreed that many of those physical and mental powers, which are at the foundation of our greatest happiness and satisfaction, our most beautiful, altruistic, and spiritual qualities, and our sublime aspirations and ideals appear only at the time and in connection with the proper evolution of the sex functions and that sex is the motor power behind these desirable human traits. These facts are illustrative of the complete unity of human nature.

No argument is needed to establish the proposition, that the building of moral character is the paramount aim of all worthy education. If the public schools of this country fail in this supreme function, we know from the lessons of history what our doom will be. The keen realization of the momentous issues involved, combined with an appreciation of the significance of adolescence in the development of the highest moral living of which the individual is capable, has recently led many

excellent students of education to propose and urge that there be placed in every high school "distinct courses in moral instruction;" and serious and worthy efforts have been made to provide the material for such courses and suggest the method of instruction suited to putting them into operation. It is difficult to say who are the orthodox in this matter, those who believe in the efficacy of direct and explicit moral instruction, or those who lack faith in its potency and even see possible dangers that may grow out of such formal instruction. However, for several years the question has been before us, "Can morality be taught?" No discussions of either adolescence or of problems of secondary education that aim at some degree of completeness can very well omit a consideration of the means and the possibilities of moral training; for true morality, as has been shown, is not possible until adolescence is reached, and, if it fails to appear during these formative years, the battle is lost. It is at the time of their sojourn in high school, too, that young people begin to have a genuine interest in national as well as personal ideals, ideals of liberty, justice, equality, freedom, and the like. Thus from the standpoint of training in the American virtues included under good citizenship, as well as personal morals, the high-school age is important.

What shall be the answer to the question just stated? No, morality cannot be directly and explicitly taught. At least this is the negative thesis here defended. Morality is not to any great extent an affair of the intellect; it takes its rise from foundations and motives much deeper; the forces which govern conduct are largely instinctive and emotional, and they go back for their origin to the entire past of the human race. As Bergson affirms, "we may think with only a small part of our past, but it is with our entire past that we desire, will, and act." There is nothing in genetic psychology that should lead us to believe that we can build strong moral characters by studying about morality and discussing moral precepts, any more than

we can develop a love for beautiful poetry by teaching its history and discussing poetical principles, or develop strong and responsive muscles by teaching muscle anatomy and the laws of physiological growth and development. What makes a good ball player? a good musician? a good linguist? a good typist? It is practice; if any instruction is needed, it is incidental; experiments have repeatedly shown that instruction to be most effective must grow out of and be suggested by practice. What makes a good man? It is being good; and men are good, if at all, under good conditions and good influences.

Readers who are familiar with Professor G. H. Palmer's essays on "Ethical and Moral Instruction in the Schools" and John Dewey's essay on "Moral Principles of Education" will see their influence in some of the following paragraphs.

As a subject of thought or discussion, morality has at least two aspects: one may be called the psychological; and the other, the social aspect. The one fixes the attention on the attitudes, disposition, and intentions of the individual; the other focuses on the manner in which the individual reacts on his social environment, being a matter of conduct only. Now psychologists inform us, as stated above, that conduct has its ultimate origin in the native instincts and impulses; hence, if we are to influence conduct in any fundamental and formative way, it must be through the instincts and impulses. If the desired conduct is secured by any other means, the results are likely to be imitative and mechanical, because the deeper psychological causes have been ignored. For example, if, in our ardor to render moral help, we appeal to the judgment and the reasoning powers, we must remember that the workings of these are colored and given their peculiar bias by individual temperament, that temperament is but another name for emotional habits, and that all of the emotions out of which these fundamental habits are formed have as their source and

their constant and impelling stimulus one or more of the primitive instincts. So much are both the moral and intellectual life a matter of temperament that, in the opinion of William James, even men's philosophies are determined by "their temperamental cravings and refusals." The psychology of this matter has been crystallized in the aphorism, "the wish is father to the thought."

Again, if in our zeal for the moral welfare of the adolescent we appeal to his conscience, we must bear in mind that conscience subjectively considered is but a group of intuitive feelings, "certain emotions," as Spencer expresses it, "responding to right and wrong conduct."

All of this is extremely fundamental in any study of moral education; for these psychological considerations seem to say plainly, put not your trust very greatly in any kind of intellectual appeal. On the other hand, our study of adolescence has taught us that the instincts and feelings are reached most surely through the imagination, when images supply the impelling forces, or through concrete social situations in which life, with its varied and complex elements, furnishes the stimuli that prompt instinctive and character-forming conduct. This doctrine has also been crystallized: moral qualities and virtues are caught not taught.

It is suggestive to recall at this point that morals, like language, are social in their origin; and consequently any attempt to treat morality as a purely individual affair cannot be scientific or effective. Every one that we hope to influence must be thought of as a social individual in whom are continually meeting myriad lines of spiritual force, all having their origin in other social individuals and groups, some contemporary and some belonging to distant ages.

It must be kept in mind as fundamental, too, that the division between conscious and unconscious rectitude in conduct is a wavering line. This does not mean that we are to think of the

adolescent as unmindful of conduct or uncritical as to right and wrong; he naturally gives much thought to the matter of conduct, and, so far as mere thinking is concerned, he is exceedingly discriminating; with puberty there begins to develop the power and the tendency to judge action by motives rather than by mere consequences (the preadolescent standards) and to take into account mitigating circumstances. To say the line between conscious and unconscious right action is *wavering* is equivalent to saying that the most wholesome and most formative conduct on the part of youth is that which is instinctive, spontaneous, and ebullient, resulting from natural stimuli supplied in concrete form by his social environment, rather than that conduct which is premeditated and critically thought out, either by or for the individual. Moreover, the one who perforce follows a straight and shut-in path develops neither enthusiasm for his journey and its ultimate objective, nor does he gain power to ascend the hill Difficulty or courage to fight Apollyon from his path. Bunyan was too much of a psychologist, as well as theologian, to confine his hero day after day to any straight and narrow way. It is the zest with which an act is performed and its emotional setting that gives it formative value and tends to make it become a habitual mode of action.

We should not ask our young people to be "slaves to motives and reasons"; nor can we expect them to "rivet the moral life to logic"; nor is it natural for them to control their conduct by any system of restraints and inhibitions; but, as urged in the last chapter, the highest moral living of which each individual is capable will be most naturally and most surely brought about by a comparatively free, wholesome, joyous, and above all vigorous exercise of all the physical, mental, and social powers that make for bodily and spiritual wellbeing. It is a case, not of damming the turbulent streams of adolescence, but of keeping them within the channels, where

they fructify and fortify the individual life for its unique continuance and work.

If this analysis is correct, it seems to exclude the notion that much can be accomplished in the field of morality by direct moral instruction. On the other hand, it appears to suggest that much can be done by supplying the right conditions, — conditions that provide for natural physical, mental, and social responses on the part of youth, the hope always being that these responses will become habitual and result in a disposition to choose the right and reject the wrong. If we are successful in this, we have as a consummation real moral character, capable of *unconscious* rectitude, “standing four square to all the winds that blow,” instead of the careful, vacillating, thought-perplexed Hamlet that might result were we successful in getting impulsive youth to make conscience his sole guide and bring all matters of conduct to the critical court of introspection; that is, the introspective method of determining conduct would seem to be the logical outcome of direct and explicit moral instruction if successful. Those who aim at this method appear to ignore a fundamental law in human development; namely, that life of any kind is kindled only at the torch of the life that is desired.

Palmer reduces the whole matter to a sound fundamental principle when he says, “According as the thing undertaken includes a creative element and is intended to give expression to the personal life of some one, dependence upon any system or method that makes a direct appeal to consciousness becomes increasingly dangerous.” Beyond question, the purpose in moral education — nay, in all education — is to *create* moral character; that is, to fix moral modes of feeling, thinking, and willing; and the habitual moral conduct which we hope to establish must, if it is real, give rise to the inner, *personal life* of the individual. Palmer is right, too, because the ultimate thing sought in this case is not knowledge but

conduct, and not conduct that results from careful choosing and calculating, but conduct that is instinctive, sure, and firm. It would seem to be the part of wisdom to lay direct hold on the thing desired when this is possible.

Further, when we attempt to reach conduct through the intellect, we evidently have in mind conscious action; and, as Palmer points out in his discussion of the matter, there are large tracts of practical life that lie altogether beyond the field and control of consciousness. For more than a third of a century psychologists have recognized the subconscious self as an entity that must always be reckoned with in our dealing with human beings; from this region are continually welling up obscure but potent influences in the form of unaccountable impulses, inhibitions, hidden motives, passions, and prejudices. There are unmistakable signs that in this region of "subconscious incubations" are located the latent germs of much of our non-rational conduct, which plays such a large part in our lives; it is the non-rational, automatic, impulsive part of conduct that is of supreme interest to him who would wield a formative influence in the field of morals. There are good reasons for believing that the entire stream of consciousness, especially the billows of feeling, passion, and emotion, has here in this deep and unexplored realm of the soul a reservoir for the storage of those rich and complex elements that seemingly without call reappear as moral conduct and character. This is one way of justifying Dr. Bagley's contention that, "as the instinct is basic to reason and sometimes overrides it, so the affective [or emotional] elements in an ideal overshadow the intellectual factors." If this account of the part played by the subconscious self is correct, a direct appeal to the intellect by means of moral instruction is, to say the least, seriously inadequate.

The attempt to aid young people by means of direct moral instruction seems to take for granted that in some way one can make a spiritual gift; it appears to be an endeavor to hand

over ready-made something which it is hoped will be of moral value to the recipient. This surely is a false assumption. As a result of living together during the past generations, man has discovered through social experience that there are certain modes of conduct on which the welfare of the individual, taken in the long run, depends; this wholesome manner of acting has come to be embodied in a code of moral laws or precepts; they are far from being arbitrary prescriptions imposed by authority; rather they are natural laws, merely telling what conduct works best. These moral standards are the result of a long race struggle; and they have finally been accepted as guides by the successful individual, usually after some sort of a struggle similar, perhaps, in kind to that of the race. When obtained in this way, these moral decrees have real and practical significance. The individual must win his social and moral inheritance if it is to be of value. Exercise of moral faculties is just as vital as exercise of the physical powers and organs; the biological sciences teach the inevitable tragedies that result from a lack of effort; and moral atrophy is just as certain as physical loss of power. The law of work or struggle is part of the law of evolution. Christian people are wont to quote Paul: "work out your own salvation." Some would have us tell youth in what salvation consists; perhaps they will listen, but are we sure they will learn? As in other affairs of nature, what costs nothing comes to nothing. Moral truth is a food that cannot be bolted whole, it must be assimilated in order to give real growth and strength; to this end the moral muscles must be used with vigor. Dr. Bagley shows his knowledge of youthful nature when he asserts that every overt attempt to force adult standards "is bound to be abortive." "There seems to be almost an instinctive tendency among youth to resent the implication that they have anything to learn from the experience of their elders;" and according to St. Paul's doctrine, are they altogether wrong?

Confidence in moral instruction seems to be based on the further assumption that knowing what is right will lead to doing what is right; whereas only a slight knowledge of adolescent nature is necessary to make one aware of the serious hiatus which is common between the two. This notion again ignores the fact that the adolescent is a creature of instincts and impulses; and that, because the impulses spring from man's physical and psychical natures, they are in a certain sense no more under his direct control than the other forces of nature. The adolescent naturally does what he wants to do and what seems at the time easiest. That he is a being of impulses suggests that we must manage to set loose and give scope to his good impulses, and he has many. Sometimes we will aid in transmuting the lower values into the higher; and sometimes, as in sex education, we will assist him in controlling one emotion or instinct by another. The good impulses and the higher values naturally grow out of healthy activities; and careful study of the matter shows that many of the instincts and emotions that must be held in check have their corresponding instinctive or emotional antidote; for example, developing adolescent altruism may overcome instinctive selfishness, sympathy should displace cruelty, self-control supported by pride may rob anger of its danger, chivalry is a natural corrective for the sex impulses, emulation and the desire to please may act as a counterpoise for any impulse that we wish to control, and with some during adolescence, as we have seen, the religious motive is very powerful and may "turn aside the fiery darts of the wicked." We must not make the mistake of thinking that repressed desires and emotions are killed; they are the noxious growth ready to spring up again when the forced repression, either intellectual or other, has ceased; they must be displaced by some wholesome plant of vigorous growth, and for the adolescent this plant must always be found in his social environment. To change the form of expression, his

ideas must be emotionalized and become dynamic ideals by some kind of genuine social experience.

The analogy between moral laws and physical laws alluded to above is interesting and significant; but there is a very important difference between the workings of these two sets of laws, which is also interesting and significant. The laws which pertain to life and character are much more complex; and, because of this and because of the uniqueness of individual human nature, the same experiences will result very differently for different individuals. Thus we can have no assurance that because a moral principle or precept has worked it will always work. We must inculcate morality by the laboratory method, but we must not expect laboratory precision and certainty of results. Life and personality are ever-creative, hence the eternal variation in the moral realm. All these considerations emphasize the futility of trusting greatly to definite precepts. We are wont to quote Shakespeare: "to thine own self be true;" then some one proceeds to tell us what moral truth is in the abstract. Thus again we reach the conclusion that morality is to be learned only by practice. It is an art. Ethics is the corresponding science that will be very interesting and possibly helpful later.

Sometimes it would almost seem that the advocates of some system of direct moral instruction are confusing moral ideas and ideas about morality. There is of course no psychological reason why ideas concerning morality should have any more influence on conduct than ideas concerning anything else. There is nothing inherent in the nature of such ideas that insures a vital union with character, and without this union nothing will result in terms of life. Learning the moral vocabulary is a very different thing from learning moral values; one is likely to be largely a matter of words and ideas, which by themselves do not constitute a vital force; the other comes in the way that we learn other values, which is through actual

contact and experience in the field where the values are determined, in this case amid the interplay of human relationships.

There are certain dangers that naturally beset explicit moral instruction; the nature of these dangers varies with the character of the individual. For example, a sensitive nature, at the time when the moral sense makes its appearance, would be likely, under the stress of vigorous moral instruction, to develop a morbid sensitiveness or an exaggerated punctiliousness, effects which are very unfortunate for both the individual and his associates. L. W. Kline studied the returns from 2594 children, and, according to Hall, many of these "bear unmistakable marks that in homes and schools moralization has been excessive and has produced a sentimental type of morality and often a feverish desire to express ethical views." This danger, too, is greatest in the case of adolescents of the finest fiber. The opposite danger, also unfortunate for the individual and the community, lies in the fact that normal, healthy children become hardened against talk that savors of preaching; there comes a time when they prefer little talk and much action. This indifference to what is said on so vital a matter may lead to lack of responsiveness to legitimate moral claims.

But we are repeatedly reminded that "youth is the battleground of the moral life;" and when a serious battle is on we feel that we must take a hand and join forces against the enemy. If we are not sure of rendering aid by any direct method, can anything be done? Yes, there is much to do, and adolescence is the time to do it. To be permanently effective, the help rendered must be social-psychological. These high-school boys and girls have been born into a social environment which is already largely determined, and this environment has among its elements certain standards of conduct to which they are expected to conform. Hence the whole problem is to get the pupils to accept this moral world which awaits them and adjust themselves to its demands. To do this, the school, the family,

the church, and any other institution with authority and influence must reproduce as far as possible the conditions of the best surrounding social life. It is not a matter of teaching morals but of getting individuals and groups to *live* morals. To this end we try to create a "moral atmosphere," which they are to breathe. The school with a high moral tone teaches in a subtle and indirect way all the time, in the classroom, at general assembly, and especially in connection with all athletic and social activities. Moral issues are constantly arising, and, if these are settled right by getting the right thing done, there need be little discussion or moralizing. In the school all the higher interests of humanity may be duplicated; the pupils may learn the forward and upward look; and the virtues here enacted will be their own justification. We may safely put our trust in the efficiency of this form of moral training; because every lesson takes on a dramatic interest, and, when the spirit is good, all the moral precepts are supported and enforced by the social will.

What has been said thus far is not intended to preclude incidental moral instruction; this may be profitable, especially when the pupils ask for help or the occasion strongly suggests it. When the youth has reached his later teens and is beginning to live in the higher moral region and is peering upward for light, there should be some one waiting for the privilege of rendering high personal service. "Happy the youth," says Palmer, "who during the transition time has a wise friend at hand to answer a question, to speak a steadying word, to open up the vista which at the moment needs to be cleared. Only one in close personal touch is serviceable here." It is invariably true, as indicated by the testimony given in after years, that the teacher who gave purpose, inspired confidence, and aroused ambitions is the one most valued, rather than the one who impressed with his scholarship or dazzled with his brilliant classroom technique; and, most important of all, life's ideals

and the highest ethical truths are never seen perfectly by youth except when embodied in a personality. Thus moral influence is not something for which a method can be proposed or a department provided; it is more in the nature of a continuous benediction coming from those who *live* on the higher spiritual planes, yet in the closest personal touch with youth.

When the wholesome moral tone or atmosphere, of which the reader understands the importance, is lacking, it cannot be created in a day or perhaps a year. The time and effort required to bring about anything so fundamental and involving so many activities and people will vary with conditions; and it will only result from sympathetic coöperation and dealing with the pupils on a human basis. There must be some one with courage and force of character to take a square and firm stand on all moral issues that arise, to place responsibility as rapidly as possible on everybody, to insist on good work in the classroom, the social organizations, and the athletic field, to place the bluffer, the loafer, and the liar in their true light, and to demand with smiling firmness the utmost frankness, courtesy, and refinement at all times. When these things are present, the school is doing a great moral work for the community; and this work it can do more effectively than any other institution, because it is a complete social unit with definite purposes; it is an epitome of the world which will soon receive the pupils, and its work is of such a nature that each must constantly have regard for the welfare and rights of others.

This suggests the relation of rules and regulations to moral training. Outward conformity to the social requirements of the school and its many organizations can be secured by means of thoroughly enforced rules. But life and its requirements are too varied and subtle to have all its moves determined by rule; no systems of school-made laws can forestall all "spiritual disasters." Movement by rules precludes real moral experiences. Rules are ready-made judgments which must be

accepted and naturally have no vital meaning for those who obey. Living by rule may be another form of bolting moral pabulum, instead of a true means of spiritual livelihood. In a sense, the imposition of rules implies a lack of faith in those for whom the rules are made, a serious matter when adolescents are involved. Few outside of a Prussian system would claim that it is the function of the school to create docile, passive creatures, comfortable as they are to deal with. Fear is not the *end*, but only the *beginning* of wisdom, as the Psalmist assures us. There must be inculcated a sense of orderly freedom and independence. If regulations are needed, the pupils will coöperate in the making of these regulations. Social and moral judgment, like the organs of the body, can grow only by self-directed activity; self-determined, moral action weaves the fibers that form character. This does not mean "self-government"; high-school pupils always fail in this. Neither does it mean indulging the whims and caprices of the pupils; this would be fatal to sound moral growth.

In the preceding discussion the reader has not found anything radically new either in what is suggested or in the method proposed. It is simply urged that the work of the school be planned and carried on with the utmost faith in the purposes and judgments of the pupils, that the whole be permeated with a spirit of coöperation, and that there must be a sweet reasonableness running through it all; for the adolescent has slight respect for laws based on mere authority. There has been emphasized the importance of self-control and personal responsibility, learned through the operation of the pupils' own corporate life, this life to be so directed as to unify every kind of wholesome human activity.

In these discussions the word "punishment" has not occurred, a word to which Spencer gives such a conspicuous place in his classic chapter on "Moral Education." A full consideration of the subject of penalties and punishments properly belongs

to a book on school discipline. However, when the regular work and the other activities are really socialized, the Spencerian theory of natural consequences will obtain; for the judgment of the student body, when given adequate means of expression, will provide both the social rewards and punishments, effective in all except extreme cases. Both the moral motives and the social awards are "contributed by the consequences which the act naturally produces."

Thus far nothing has been said about the relation of the subjects of the curriculum, which occupy most of the school time, to moral education, except to intimate that any subject can be so socialized and vitalized as to make it contribute to the moral growth of the pupils. But there are certain subjects that more readily and effectively lend aid in this culminating function of the school, due chiefly to the human elements in their content, or to the eternal principles to which they give expression. They are the subjects that embody the best thoughts, the most generous emotions, and relate the worthy deeds of past generations. These can be made to help greatly in forming ideals and in solving life's problems. The studies are history, biography, natural science, literature, art, and English expression. To produce the moral influence desired, they must be presented imaginatively and whole-heartedly.

To the adolescent, human beings when studied through their acts are most engrossing; for the adolescent is himself just becoming a human being in the deeper sense, and he is naturally interested in anything human. It is a time of hero-worship and enthusiasm for great deeds and great thoughts, especially if they are given their true emotional setting; the adolescent is thus made to live vicariously the lives and deeds of the great ones of the earth. When incarnated, moral truths and principles make an effective appeal. Hence the influence of literature, biography, and history: they are replete with the doings of great souls; and, because they are human, they enforce

their own lessons without a moral appendix. In other words, they are rich in moral content and effective for moral instruction. History shows forth the workings of life in the nations; and biography, in the individual. They both "constantly typify certain universal ideals," as Dr. Bagley asserts; "courage, fortitude, initiative, efficiency, foresight,—in fact every conceivable human virtue may be given a surer footing in the individual mind through the study of history and biography." Literature, as a whole, interprets life in all its phases; and from the standpoint of content is based on fundamental instincts and provides vicarious gratification for "desires that cannot be realized directly." They all help to enrich and clarify the meaning of life. But unless the pupils are really stirred, these subjects will fail of their natural influence. Dr. E. O. Sisson throws out this caution: "Human studies may be quite dehumanized either by intellectual abstraction or by spiritual indifference, and may then become rather immoral by accustoming youth to look with untouched heart upon ideas and images that ought to arouse the emotions of any true man."

The moral advantages and dangers of oral and written expression have been discussed in a previous chapter on debating. One of the most important by-products that may come from any kind of English expression is training in self-honesty; it should make the pupil aware of his own ignorance and continually force him to realize that nothing short of clear and adequate knowledge of the truths and principles involved in his theme will insure success. The moral effect of this work depends largely upon the subjects chosen (whether they demand ethical thinking) and the standards of originality and truth-telling that are maintained. The pupil must image clearly, report accurately, catch the viewpoint of those for whom he writes, and proceed to give the truth exactly as he sees it. All who have had opportunities for observation outside the schools realize how low are the ideals that generally

prevail concerning all the qualities that are included in honest composition.

The study of art or any form of beauty, as we learned in a previous chapter, makes a stronger appeal now than at any other time; and any form of art which really absorbs the interest provides a safe means of long-circuiting the impulses and emotions that are seeking an outlet. There are many forms of art work which supply natural opportunities for training in coöperation. The enthusiastic student of any art soon realizes that there are other than material values in the world and he comes to appreciate Keats's "First in beauty shall be first in might."

The sciences furnish training in truth-getting and truth-telling; they make for open-mindedness; as Neuman has urged, they "deal with a realm of eternal principles which the caprices and feelings of mankind neither create nor alter;" and they draw attention to the heroic in the lives of those who have patiently labored in obscurity for the good of their fellow-men. Here again the method of approach and the spirit of the work determine the moral value resulting.

Thus, whatever instruments of moral training we consider, or whatever phase of the moral life we emphasize, we always arrive at the idea that moral education, especially during adolescence, is a social process. He who has gained the power to observe correctly and comprehend social situations and who has the self-control and the desire to react habitually in the interest of the broadest social service is perfectly trained in morality.

CHAPTER XX

PRINCIPLES AND METHODS OF APPEAL

Frequently, in the discussions of the preceding chapters, there has been suggested various lines of conduct that it would seem best for high-school pupils to pursue if their school life is to meet their needs in the most helpful way possible; but, from a practical standpoint, perhaps too little has been said as to how we are to get the proverbially self-willed adolescents to do what we believe their own interests demand. It is the purpose of this final chapter to attempt to render help in this important and delicate matter. It will be understood that mere outward conformity to the wishes of those in authority is not the thing aimed at; this kind of conformity is usually easy to obtain, but it is here assumed that the reader is not interested in any such external submission to authority.

The controlling thought of the chapter may be summarized by saying that much knowledge of human nature, more especially adolescent nature, is what is most needed in order to appeal successfully to high-school pupils; but this commonplace statement is too abstract and general to be very helpful in any practical way. However, the reader will readily see that what is said of each topic discussed is but a recognition of some phase of human nature as we find it exhibited in boys and girls of high-school age. We are to attempt to deal with people as they are, with a view to making them what they should be, the only practical working principle.

1. All men that have been able to deal successfully with their fellow-men have been guided by this principle. One of the most instructive examples of a practical application of at least

one aspect of this principle is embodied in the famous funeral oration delivered by the great Pericles at the close of the first campaign of the Peloponnesian War. This oration is a splendid example of ancient oratory, remarkable and stirring in its eloquence and wonderful in its effect. As we read them, the great orations which Demosthenes hurled against Philip of Macedon are stirring and wonderful in their eloquence; but they failed completely in what the world's greatest orator sought to accomplish; they did not rouse his people to their duty. Not so with the funeral oration of Pericles, of which Thucydides has left us an admirable report, a report which constitutes one of the most interesting and valuable memorials of antiquity. It was the custom in ancient Greece, after a campaign or battle had been fought, to assemble the people and hold an imposing public ceremony, the chief feature of which was a funeral oration pronounced by one of their great orators over the remains of their dead countrymen who had given their lives that their country might live. Pericles is known to us as a great patron of art, but he was also a practical man of affairs and a wise statesman, who knew his country and its institutions perfectly and saw deeply into the nature and temperament of his discouraged people. As their orator, he vividly outlined for them the growth and development of Athenian institutions; he urged upon them anew their wonderful intellectual advantage; and he pointed out with due emphasis their moral and social virtues. In other words, he held before them their own better selves; and thus it was that he sent them to their homes with new courage and resolution. This was a great day in ancient Athens; in a sense we may say it was the day of its new birth. May we not say that sometimes it is a great day in the life of a boy when some one takes him and sympathetically reveals to him his own better self? Will he, too, not go forth encouraged and highly resolving? And will he not the more gladly conform to the social will as

expressed by the conditions and regulations of the life which surrounds him?

It is unnecessary to urge that there is always something in every pupil or group of pupils worthy of praise and that any one who has not sufficient insight to discover it cannot but fail at a most vital point in his work. It is also unnecessary to point out in detail the many advantages that arise to both the teacher and the pupil because of the new relation that is established between them by an expression of appreciation on the teacher's part. The expressed appreciation must, of course, be true, growing out of real insight on the part of the teacher; the youth cannot readily be imposed upon by any sentimental or imaginary virtues that the teacher might be tempted to attribute to him; for he will not be fooled in this matter and the one who tries it will be sure to lose the pupil's respect and consequently fail in his purpose. It is a case that requires both insight and honesty.

2. Because of the strong social bent of the adolescent, and because of the altruistic instincts that are normally developing at this time, there are certain words and phrases that make a strong appeal when used (if not overused) by the right person on the right occasion. These are examples of what is meant: "gentleman," "square deal," "playing the game fair," or other terms of like import. Such phrases embody some of the universally acknowledged social virtues of virile manhood and hence make a powerful appeal. If the use of "gentleman" is reserved for the one who has a sense of proportion and relations and hence makes his conduct appropriate to the circumstances and the occasion, the term will have much meaning, and it will have a pleasing sound in the ears of our boys, for it describes a form of conduct for which they very much wish to have credit. The period of youth, as we have seen, corresponds in the world's history to the age of chivalry; it is the time in life when every individual wants to be considered a gentleman or a lady. The

expression "square deal" has come to have great significance and a rich connotation because of an appealing and vigorous personality, who, in recent years, gave the ideals which the phrase implies concrete fulfilment; hence it has for many a kind of personal appeal. All Americans admire the one who plays "a fair game"; and whatever their true nature, young people of high-school age desire credit for good sportsmanship; consequently anything that implies this test of their conduct is likely to influence them.

But this is only one side of our story. If one hundred high-school pupils are asked to make a careful statement as to the quality they consider most important in an ideal teacher or principal, a very large majority (the majority being larger among the boys) will say "fairness," or something to that effect; and this they *demand* so far as their position as pupils permit. Youth seems to have an instinctive and almost unreasoned sense of justice; and his standards of justice and fair dealing must be respected and fortified and made part of his moral character. Sometimes it would seem that the high school is the last chance for many to develop and establish a true and keen sense of justice; for in the great industrial and economic world human relations are often discouragingly out of joint, and

"Man's inhumanity to man
Makes countless thousands mourn."

Amid the maladjustments, anomalies, and exploitations of the industrial maelstrom is not a safe place to develop a sense of justice. Certainly nearly all teachers intend to deal fairly at all times with their pupils; but, if the pupils interpret matters otherwise, the practical results are the same as when the intentions are wrong, being a form of social inefficiency on the part of the teacher that makes for failure. The teacher, too, must "play the game" and make all feel that he does it

in a perfectly fair manner. Even the severe teacher is approved if he seems just.

3. In mentioning the words and phrases to conjure with, we might well have included another; with the adolescent "honor" is a word of much potency. When "honor is the subject of our story," we may well expect the youth to be as responsive as was the ancient Brutus. Yes, "honor" is a good word, but the thing for which it stands cannot be systematized, as many well-meaning school officials have tried to do; it is something too individual, too personal. When we speak of "honor systems," either we are using the word "system" carelessly, or we are deceived as to the thing itself; like "self-government," it is a misnomer.

Yet, inaccurate as the expression may be, pupils are often fond of using it as opposed to government by rules and regulations. They are proud to think that they are controlled by motives of honor, and it is a worthy pride. There is no doubt but that honor on the part of the pupils may be substituted for many of the old-time school regulations. The following concrete example, reported in "The Outlook" for March 29, 1913, will illustrate and doubtless be of interest.

In a high school of about five hundred pupils, in one of the important suburbs of Chicago, there had been, as in many schools and colleges, considerable trouble in the boys' gymnasium locker-room; the usual stealing, called "swiping," had, in spite of locks, become a continual annoyance; athletic and gymnasium goods were never safe.

At the opening of the school year in September, the principal called a meeting of the boys and the men of the faculty for the purpose of considering the situation. He began by giving the boys the results of his observation in some of the boys' schools of England, where the term gentleman carries with it the idea of honesty and good sportsmanship, and where athletic property needs no protection except a mark of ownership. He assured

the boys of his belief that most American boys are gentlemen, and he assured them of his faith in them and their ability to deal with the troublesome problem. The meeting was so managed as to encourage perfect freedom of discussion; and there was developed much enthusiasm in favor of substituting *honor* in place of locks. A committee of boys was appointed to formulate a plan; a simple plan, including a few rules and a permanent committee, was reported at the next meeting; and the plan proposed, which came to be known among the boys as "the honor system," was adopted by a vote of fifteen to one. According to the plan adopted, all locks were removed from the lockers, and a committee of boys had full charge of matters pertaining to the locker-room and the enforcement of rules concerning athletic and gymnasium equipment.

The scheme worked almost perfectly; as far as was known, all "swiping" stopped. The committee, which frequently sought advice from the principal and the coaches, handled matters with promptness, tact, and decision when there was any technical violation of the rules. The question of withholding information concerning what happened in the locker-room never seemed to occur to the boys; loyalty to the cause appeared to take the place of loyalty to "the bunch." The committee in charge was composed of the president of the boys' athletic association and two members from each of the three upper classes; and, although the committee dealt with considerable severity in one or two cases of violated regulations and in general was very exacting in the performance of duty, the boys on the committee retained the confidence and good-will of the other boys.

The success of this experiment seems to indicate (and this is the reason it is reported here) that the important thing in appealing to boys of high-school age is to trust them, to have faith in their ability and their good intentions, and to show it by giving them as much responsibility as possible. It is

only by so doing that we can really place matters on an honor basis and rightfully use the word, a word which naturally makes a strong appeal because of the manly and noble virtues which it implies.

4. There is another point at which the idea of honor touches the life of adolescents, especially boys, and which at times assumes much practical importance; and that is, in its relation to a sort of code of honor which boys invariably maintain. A familiar and important phase of the code makes it a gross form of disloyalty to report a misdemeanor of a fellow-pupil. This matter has considerable theoretical interest as well as practical importance. This was shown by the large number of thoughtful people who participated in the discussions on "Who Broke the Window?" which continued for several issues in "The Outlook" during the year 1913; and the great variety of opinions there expressed indicates that we are still far from complete agreement on a matter which must be fundamental in our dealings with boys from fourteen (age of the boys Good and Bad in "The Outlook" discussions) to eighteen.

Any one who has ever been a real boy or who has had sympathetic contact with boy life can have no doubt as to the moral position that all normal boys take in this matter of giving incriminating information involving any of their group. This unanimity of sentiment, as in other cases, surely has significance. Because the adolescent is controlled by pretty definite ideals of rectitude and loyalty in refusing to "squeal," and because of the utter contempt that is felt for the one who is "sneaking and low-down" enough to tell, the idea of asking a boy to inform on members of his group is something from which one naturally and instinctively recoils. Yet numerous reasons are forthcoming why the desired information should be demanded by those in authority. "Boys are expected to grow up into good, public-spirited citizens; and they are now enjoying the citizenship of their school with its many privileges.

They owe a duty to their school and to those in authority; they should aid in maintaining order and protecting property. Later, if asked in court for testimony against their friends, they must 'tell the truth, the whole truth, and nothing but the truth,' and to do this is a mark of good citizenship. Thus it is a part of the training for good citizenship that pupils be made to understand that it is their *duty* to expose the offenders that they may be brought to justice. By so doing, are they not proving their loyalty to their school; and, in the last analysis, are they not acting kindly toward the guilty by making it possible that they may learn that the way of the transgressor is not safe?"

All this sounds very logical to the adult mind; and we may be sure that this line of reasoning had its origin in the mind of some adult, one who, perhaps, has failed to get the viewpoint of the real boy-world, or who has found it very inconvenient and annoying to deal with this phase of the adolescent's idea of loyalty. Although usually unconscious of it, we adults have a way of making the comfort and convenience of the adult-world the criterion by which we measure the conduct of the younger generation; and naturally youth applies the same kind of standards and reasoning to us. When we ignore or outrage some of their cherished ideals and standards, it is well for our peace of mind that we do not know what they think of us, and that we do not hear the appropriate names they apply to us.

Whatever practical conclusions we may reach, it is wholesome to look at the matter under consideration from the adolescent point of view. When asked to incriminate any of his group, the youth feels that he is asked to renounce his allegiance to his group who are his friends (few adults have sufficiently good memories to realize the meaning of this); and he is renouncing this allegiance at the command of a teacher, who is of necessity a rank outsider. One boy of sixteen thinks, "it is better to

have the teacher mad at you than all the boys," "for they finally become your fellow-citizens;" this boy is serious and judges acts by their distant effects. We must understand that shielding a fellow-pupil is not, in the mind of a normal boy, a question of law and order at all; hence our logical inferences concerning law courts do not appeal. For the adolescent, it is a serious moral question, which he feels that he must decide on a higher human plane. As one boy about to graduate from high school expresses it, "there is in every boy's heart a higher law, a law of loyalty, faithfulness which grown-ups seem to lack"; this is "one virtue, one quality that stands out above all others in the boy's mind." In general good citizenship demands that the individual live up to the highest ideals of conduct known in the group or community of which he is a member; the high-school pupil who is steadfast in his loyalty to his group is living the best type of citizenship of which he knows, for he is controlled by the highest ideals of his group. Are there not many convincing reasons for the belief that, when he becomes a member of an adult community outside of the school, he will live up to the highest standards he finds there? At any rate, this is the adolescent viewpoint, and whose case are we considering anyway? Is it that of the adult, or is it that of the ordinary high-school pupil? As stated at the beginning of the chapter, it is fundamental to success to deal with people as they are, rather than as we think they ought to be.

This youthful way of looking at the matter is also shared by many who have had much experience with the workings of the adolescent mind. To these it is satisfying to find that the late Dr. Royce of Harvard University, in his book on "The Philosophy of Loyalty," reaches the same conclusion on purely philosophical grounds and thus expresses himself. "The parent or teacher who trifles with the code of honor of children by encouraging the talebearer, or by even requiring that a child should become an informer, is simply encouraging

disloyalty. He outrages the embryonic conscience of his young charge."

In all of the foregoing discussion, it is assumed that the offense is some form of mischief or trick, damage resulting from carelessness, infraction of some school regulation, or the like. But, if the misdemeanor is something serious that really affects the welfare of the group morally or the usefulness or ideals of the institution, we have an entirely different situation. In this case we must secure the coöperation of all the right-minded members of the group; and, if the matter is vital, they will stand ready to make common cause against any who violate their group integrity, as was done so vigorously in the case of stealing athletic goods cited above. We can trust the boys' common-sense and moral judgment to discriminate between a school prank and something that jeopardizes moral character or threatens to defeat the purposes of the school.

But it will be urged that frequently things happen around a high school concerning which, although they are not morally vicious, it is well for those responsible to know the whole truth; certainly all with experience know this only too well. However, there is another way and a better one of securing the desired information than by means of tale-telling. It is by frankly and fully respecting the boys' code as you find it, then raising the whole matter to a higher level by insisting, if any harm has been done, that the guilty one become his own informant. The culprit who does this at once finds himself regarded in a new light by his group; he is admired for his frankness and courage; his friends have assurance that he is not "yellow." When this is brought about a few times and becomes an established practice in the school, we have introduced a new ideal in the school's code of honor, and one in which the whole school comes to take just pride. To some who have not made use of this plan it may seem impracticable, but such is certainly not true; it is on the ground of its extreme practi-

cability, as well as of its importance in the formation of character and its good influence on the spirit of the school as a whole, that this method is urged. It is true that, until the standard of honor necessary to bring about the results described is firmly established, much tact and determination on the part of some one who has the respect and good will of the pupils are needed; and it is an ideal of conduct that requires considerable time, sometimes more than one year, to become operative in a large school.

When the desired information is not forthcoming, one can enlist the help of the innocent members of the group involved. This help they are ready to give if they can do so without violating their ideals of honor; generally they are pleased to line up on the side of the right. The form of reasoning is something like this: no one wishes you who are innocent to expose your friends in such a matter as the one under consideration; but it is neither fair nor pleasant that your innocence should not be made clear, and it is your privilege to insist that those who are guilty give the information needed to clear up the whole affair; by so doing you exonerate yourselves, aid in establishing a splendid ideal for the school, and, best of all, you are helping your erring schoolmates to do a manly act that will in the end bring real satisfaction. The author has never known this mode of appeal to fail. Public sentiment is always powerful and the pupils can easily bring sufficient pressure to bear. It is not necessary to discuss the great advantage that comes in establishing and fostering right relations between the pupils and those directly responsible for the management of the school.

5. The next principle of appeal to be considered here has, we hope, been embodied in many of the preceding chapters; especially is this unifying principle the warrant for many of the things urged in the chapter on the social activities of the high school; in fact, it is fundamental in all educational think-

ing that is really modern; and it is an extremely practical working-doctrine. Some one has expressed the idea by saying, that the youth must be treated as a whole if the treatment is to be *wholesome*; that is, we must appeal to his whole nature. For many reasons we are inclined to think, or at least act, as though education were largely an affair of the intellect. This conception of the matter is readily explained. In our high schools we have been busy much of the time with things which appeal to the intellect; and we are reassured in this course of procedure because our efforts along this line are capable of more or less supposedly definite measurements, and we naturally find comfort and satisfaction in any form of tally sheet.

Again, it would appear that the application of this principle of a whole-souled appeal is not fostered by the great emphasis that has been placed in recent years upon the study of psychology, especially in institutions whose function it is to train teachers. Any scientific study naturally tends toward developing and fixing an analytical attitude. Psychology, being a science, rightfully occupies itself with descriptive analyses of the human soul; and is it not to be expected that this analyzing habit on the part of the trained teacher should carry over into his treatment of his pupils? But the practical man of human affairs and the born teacher know intuitively that the human values are destroyed when we force on them the catagories of psychology. The men who have been most successful in influencing and controlling their fellow-men have always dealt with them as units by appealing to their whole natures; they recognize in each a real, willing personality, whose inner life constitutes a vital unity. The late Professor Münsterberg has reminded us that oxygen and hydrogen will not satisfy a thirsty man, and that life speaks the language of the thirsty.

Instead of being a matter of the intellect, education in the final outcome is an affair of attitudes and conduct; and we have long known that these are controlled much more by the

instincts and feelings than by the intellect. We also know that the instincts and feelings are reached most surely through the imagination. As has already appeared in the early chapters, at no time is this avenue of approach through the imagination so wide open as during the high-school age. The adolescent mind naturally functions much of the time through the imagination, the social life, and the emotions, and expresses itself in the form of intellect only a small percentage of the time. Thus the high-school teacher, in order to make the strongest and most successful appeal, must address himself to the whole nature of his pupils; for him his pupils are much more than intellectual mechanisms ready to be put in motion, and they are much more than psychological specimens.

6. If the high school is to make the proper appeal to its pupils, the spirit and principles of democracy must prevail. This is another commonplace; no one now questions the wisdom of this doctrine. But only those who have had experience are aware of the difficulties involved in maintaining these principles; let the trials and tribulations of those who have had to deal with fraternities and sororities bear testimony. The causes that interfere with thoroughgoing democracy in the community are naturally active in the school. The consequent difficulties are not easily overcome, because in general they cannot be met in the open and regulated like other troubles. Democracy is a spirit that must be developed; rules and regulations will not produce it. In a sense democracy is like faith; often it is a matter of growth. When the spirit of democracy is abroad, each sincerely believes in the worth of all the others and that they are to have a full opportunity to do their best. There can be no true justice without it. Unless the spirit of democracy is developed and its principles are maintained, the school is wanting in that vital social unity that is necessary to its highest efficiency. As R. S. Bourne asserts, democracy "stands people up on their own feet, makes them take up

their beds and walk." It expects every one to carry more than his own load with neither favor nor handicap.

The public high school is one of the best places in the world to inculcate democracy. If not perverted, the adolescent naturally has a passion for justice and is impatient with anything that suggests artificial distinctions or unearned honors; he wishes to feel himself a part of a coöperating group of equals. This fits in with his ideals of fair play and his natural robustness. At heart he is willing to be stripped of all distinctions except those which come from character, natural ability, and his own efforts. This is the youth as nature would have him; and the school conditions are favorable for his nurture. In the public school the pupils are actuated by a common purpose, and that a worthy one; in accomplishing this purpose, they expect neither advantages nor favors. They learn and measure one another by the way they do their work and the spirit they show in the games and by their bearing toward each other. All this surely is a humanizing influence. The high school can well be our ideal democracy; if it is not, it will fail to appeal to the best that is in its pupils, and they will not get the truly American view of life.

7. The next doctrine to be presented as necessary, if the school is to make the strongest possible appeal to its pupils, is one which in its application may be the source of much trouble, hence lead to considerable discouragement on the part of any one who attempts to apply the principle in its extreme form; consequently one hesitates to urge it in a book intended primarily for the inexperienced. Briefly stated it is this: In every high school the pupils should be given the greatest possible amount of reasonable freedom. For most high-school pupils, the period of habitual morality is past. As Dr. G. S. Hall suggests, they wish to act on personal experience and "keep a private conscience." The appeals of previous years are no longer effective; and Dewey is "apprehensive of an education

that occupies the adolescent with doing what some one tells him to do," as this does not make for independence, stability, self-reliance, or initiative. To insist on arbitrary rules and regulations at this time arouses antagonism. Even in far-off Ben Jonson's day, it was held that

"Force works in servile natures, not the free."

As to how much freedom is reasonable, hence safe and helpful, depends upon conditions, which include especially the moral and social status of the community whence the pupils come and the way the pupils have been previously dealt with; that is, those things which aid in determining the spirit, traditions, and ideals of the school. In the application of this principle of the greatest possible freedom, it is the part of wisdom to "make haste slowly." For mankind as a whole, freedom is "an acquired character;" and, as Paulsen affirms, it "must be acquired anew by each individual." Determining the degree of freedom that is wholesome for high-school pupils is a delicate procedure. It must never be confused with license, as it was in Russia. As Goethe insists, "only within the circle of law can there be true freedom;" that is, there is no freedom for all individuals unless each individual of the group keeps within due bounds, which have been pretty definitely determined. These are not arbitrarily determined bounds; but they have been slowly established by the race. It is only when one has learned to move in harmony with the rhythmic throb of the moral conscience of mankind that he is free. This is what the poet means when he says:

"He is the freeman whom the truth makes free
And none is free beside."

When we acknowledge higher ideals and standards, we establish our freedom, for thus we prove that the higher ideals are in us. So it comes about that the limitations referred to must,

in the last analysis, be self-imposed. Stated subjectively, they are in general the limitations dictated by common-sense, common loyalty, and respect for the rights of others.

Because of the general and abstract form of statement, the effectiveness of this principle depends upon the skill with which it is applied, hence the danger involved in its use. However, the school that does not work persistently and continuously toward freedom falls short of doing the best that can be done to develop strong men and women. It is not a mere paradox to say that we must give people a chance to be foolish in order to teach them to be wise; there is no other way to real wisdom. It is a twofold process: youth must mature the power to judge fitting action, and at the same time develop the strength of will to carry it out. The wisdom which knows and the virtue which does both come only through experience; and there can be no experience where all is determined and imposed from without, however wise the ready-made formulas and however skillfully they are administered. To quote Hall again, "in nature's economy," the youth must "strive, fight, and storm his way up if he would break into the kingdom of man." The fundamental difference between the child and the adult is the difference between superimposed and self-imposed limitation of freedom; and it is one of the duties of the high school to aid in leading the impulsive, inexperienced child into the estate of reasoning, self-directing manhood and womanhood.

8. The next principle or suggestion is in the nature of a comment on all that has gone before; or perhaps it may be understood to embody the teaching and spirit of the whole book. Establishing habits of conduct and forming character are matters of *guiding*, *controlling*, and *inspiring* rather than initiating and compelling. The numberless instincts and faculties are there awaiting the master-hand that will turn their natural and ceaseless activity into safe and fruitful channels. It is an encouraging and helpful truth to contemplate relative

to character and conduct, that virtue, as well as vice, is contagious; so that, when the tide is setting in the right direction, we can count on much wholesome and effective aid; for the guiding and sustaining influence of the stronger individuals of any group is always awaiting the one with an imaginative understanding of youth's ideals and aspirations who will employ it.

9. Experience and observation lead the author to believe that by far the strongest, safest, and most effective motive to which we may appeal is that of *loyalty*; if so, it is the most helpful both to the individual and to the school. The term loyalty is here used in the ordinary sense, which Dr. Royce briefly and clearly defines as, "a willing, practical, and thorough-going devotion to a cause." The "cause" may be anything to which willing service may be rendered; but it must always be something more than a mere sentiment or personal whim. Many well-meaning people have been wont to recommend altruism and self-forgetfulness as the safest and most exalted motive that we can make use of in appealing to our fellow-men; these are truly high and worthy, and no one can gainsay them; they have prompted the bravest, the most beautiful, and the most romantic deeds and lives that the world has thus far seen; in their higher reaches they may be thought of as divine. But the ordinary adolescent needs something more robust, and this Dr. Royce finds in the concept of loyalty, with its many implications. The reader familiar with his philosophy of loyalty will trace its influence in the following paragraphs.

Loyalty is a strong motive at this time of life, because it is social in its outlook; and this is the period when the social instincts are the most powerful. Loyalty always (except in the figurative sense of self-loyalty) concerns others and is powerfully unifying in its effects, binding the many in one service. Again, it is a strong motive, in that loyal conduct is never conceived as determined by mere fate or by the will of

others; it always presupposes freedom of choice and voluntary action; because of the independent nature of youth, this makes an effective appeal. Moreover, it is fascinating for young people to be identified with and work for a cause; for it gives a sense of self-importance and self-respect; the loyal individual feels that he counts at least one, while he is establishing harmony between himself and his social world. Again, the service of loyalty is a pleasure, and that an unselfish pleasure, since the cause is always something outside of self. Finally, loyalty is a strong motive, because it is contagious, especially among adolescents.

In shaping conduct and character, loyalty is the safest motive to which we can appeal: its exercise always means self-control and leads to self-restraint; it means devotion to a meaningful service, joyfully rendered; and it means interest in something or somebody, and deep and genuine interest in something outside of self is a safe and wholesome attitude of mind to establish. Loyalty is safe because it furnishes a center around which individual action moves and toward which purposeful actions tend; it blends youthful egotism with whole-hearted devotion; hence it naturally gives rise to a unity of purpose, and this makes for stability and fixity of character. Moreover, genuine loyalty is a force leading toward social conformity, which is a safe and constant influence tending toward social efficiency, a decidedly practical and permanent result.

Loyalty is especially effective as a motive at this time of life, because, as Dr. Royce expresses it, it means doing the "will of some fascinating social power; this power is the cause." The cause becomes the youth's opportunity, gives scope for the exercise of his faculties, and makes him feel that he has a mission in life which is his to fulfil. The cause in which he is interested makes a most kindly and persuasive appeal to his self-will, the logical result being a union of his natural in-

terest and his free choice. It tends to arouse in every youth a fine spirit of high resolve.

“When Duty whispers low, Thou must,
The youth replies, I can.”

It is not easy to exhaust all the ways in which loyalty as a motive is directly helpful to the individual. Loyal conduct has two marked characteristics, namely, fidelity and decisiveness. There can be no loyalty without faithfulness to a cause, and there can be no conduct, so far as the cause is concerned, that is worthy of the motive, unless it is definitely willed and decisive; and this kind of conduct continually practiced tends, like other conduct, to become natural and part of character.

Now with regard to loyalty and the school as a whole. All who have made use of this motive know that, when the spirit of loyalty is present in a high school, it is an influence most helpful to those responsible for the discipline and management. It may become a force capable of linking into one the wills of the variously minded individuals; hence follows uniformity of sentiment and action on the part of the student-body, as judged by results — an effect once sought by means of rules, regulations, and absolute authority.

Again, a genuine spirit of loyalty makes for fair play in all sports and a chivalrous respect for the adversary; for, when pushed to its logical conclusions, loyalty includes tolerance toward one's opponents and sincere respect for their point of view.

This much concerning loyalty as a strong, safe, and effective motive of appeal; now with respect to its application. We must constantly bear in mind that an enlightened loyalty means a rational and worthy cause; and it is here that the call comes for much wisdom and tact on the part of some one, wisdom to choose and tact in suggesting the causes to which the pupils are to devote themselves. Here is much scope for

the psychology of suggestion; for the final choice of a cause is to rest with the individual, otherwise it will not be *his* cause, hence will want its fascination and potency. Further, the cause must be such as gives an opportunity to be one in spirit; herein is its charm and effectiveness, making possible the most enjoyable coöperation. In other words, the cause must in a subtle way combine self-surrender and self-expression, the Christ-like and the Emerson-like attitudes; and it would seem that loyalty is the only motive of action that does this. Moreover, the cause must be one that the entire school can espouse, otherwise it would not stand the test of democracy; it must call for a maximum of significant and rational enterprise, such as can be loyally carried out by all.

Those who have had experience with adolescents will understand the advantage of choosing a fitting symbol which will always stand for the cause in the minds of the pupils. It may be symbolized by something that appears very trivial in the eyes of an adult or any one on the outside; it may be merely the school colors, a pennant, a school yell, or what not, so long as it stands for and is always associated with a worthy cause. Successful political and social leaders have always recognized the importance of this principle; a party or a movement must have a name and a symbol, and the symbol may be nothing more than the cheapest kind of a button.

Perhaps the most significant thing that can be said with respect to loyalty as a motive and its effective application is, that it is developed and kept active only by the influence of personal leaders. The teacher who is not a leader cannot make much use of it but must appeal to lower and less effective motives; talking about "loyalty" will not engender or foster loyalty.

In this chapter an attempt has been made to suggest some of the principles which underlie successful appeals to high-school pupils and some of the ways of applying these principles.

The aim has been to present only principles and methods in keeping with the nature of adolescents and based on actual experience. If anything helpful has been said, the chapter is important; for everybody knows many things that high-school pupils ought to do, but not all are able to get them to do these things.

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INDEX OF AUTHORS

- Addams, Jane, 62, 220
Aristotle, 51
Arnold, Matthew, 191
- Babcock, 77
Bagley, W. C., 137, 150, 155, 189,
203, 240, 307, 341, 342, 350
Barber, F. D., 144
Barnes, Earl, 120, 121, 124
Bell, Sanford, 76
Bergson, 336
Betts, George H., 185, 200
Bible, 32, 100, 123, 124
Boas, F., 42, 44
Bourne, Randolph S., 31, 75, 80,
118, 119, 288, 364
Briggs, T. H., 132, 134, 140
Bryant, 72
Bunyan, 339
Burns, 94, 355
Butler, N. M., 131
- Cajal, 50
Cubberley, E. P., 157
Coffman, L. D., 169
Compton, C. W., 40
Corson, Hiram, 229
- Davenport, F. M., 164, 165
Davis, C. O., 159
Dewey, John, 81, 123, 131, 135, 182,
250, 337, 365
Donaldson, 50
Douglas, A. A., 149
Drähms, 102
- Eliot, Charles W., 131, 209
Emerson, 117, 125, 231, 239, 370
Exner, M. J., 323, 324, 330, 333
- Findlay, J. J., 4
Fiske, John, 33
Fiske, G. W., 17, 277
Flechsigt, 50
Foster, W. T., 262
Francis, 132
Freud, S., 216
Friedrich, J., 120, 121
- Goethe, 366
Graber, J. P., 221
Griffing, 72
Gulick, 279, 295
Guyer, D. M., 101
- Hall, G. Stanley, 27, 33, 44, 47, 56,
58, 60, 62, 68, 74, 79, 93, 95, 105,
107, 122, 226, 249, 257, 263, 279,
280, 282, 288, 292, 294, 345, 365, 367
Hall, W. S., 330, 331
Hanus, P. H., 131
Hartwell, Dr., 52
Heckel, 16
Holmes, Oliver Wendell, 119
Hollister, H. A., 158
Holyocke, J. G., 255
Horne, H. H., 292
- James, William, 22, 51, 91, 338
Johnston, C. H., 128, 138, 142, 160,
178, 190, 198

- Jones, A. J., 156, 159
 Jonson, Ben, 366
 Judd, C. H., 6, 137, 139, 155
 Junius, 252

 Kaes, 50
 Kaiser, 50
 Kant, 120
 Keats, 351
 Kennard, Victor, 292
 Key, Axel, 52
 King, Irving, 34, 36, 94, 170, 171
 Klein, 120
 Kline, L. W., 103, 345
 Külpe, 74

 Lancaster, E. G., 66, 70
 Landois, 47
 Lee, Joseph, 7
 Leete, Dean, 203
 Lewes, G. H., 123
 Longfellow, 83, 100
 Lowell, 81
 Lyttle, E. W., 132

 MacKensie, Morell, 55
 Marro, 40
 Meiklejohn, A., 197
 Montaigne, 37
 Münsterberg, Hugo, 363

 Naismith, Dr. James, 296
 Neumann, 121, 351

 Palmer, G. H., 13, 237, 243, 283,
 337, 340, 346
 Paul, St., 342
 Paulsen, Friedrich, 366
 Pericles, 353

 Perry, C. A., 218
 Plato, 82, 280

 Riis, Jacob, 111
 Robbins, E. C., 254
 Rousseau, 16, 30
 Royce, Josiah, 5, 97, 360, 368, 369
 Ruskin, 112

 Sargent, D. A., 45
 Schiller, 228
 Scott, C. A., 214
 Sears, C. H., 227
 Shakespeare, 36, 117, 344
 Sheldon, H. D., 225
 Sisson, E. O., 350
 Slaughter, J. W., 57, 75, 96, 106, 122
 Snedden, David, 36, 131, 140, 213
 Socrates, 85
 Spencer, Herbert, 180, 248, 338
 Stetson, 134
 Stevenson, R. L., 10
 Swift, E. J., 163, 303

 Tagore, 35
 Taylor, E. H., 148
 Tennyson, 82, 119
 Thorndike, E. L., 232
 Thucydides, 353
 Thurber, C. H., 120
 Tomlinson, 134
 Tryon, 149

 Van Denburg, J. K., 168, 169, 170,
 171, 172
 Vulpins, 50

 Wood, Arthur, 111
 Wordsworth, 19, 66, 117, 124

INDEX

- Administration of junior high school, 159-164
- Adolescence and athletics, 284
 - exaggerated generally, 28-29
 - in general, 22-39
 - and *esprit de corps*, 207-208
 - and health, 51-52
 - and morality, 335-336
 - and the senses, 66-75
 - series of crises, 31-32
 - signs of, 43-44
 - worthy study, 39
- Adolescent altruism, 94-95
 - anger and fighting, 106-107
 - aspirations, 117
 - cardinal problem, 96-97
 - conformity, 352
 - cruelty, 107-108
 - derangements, 52-53
 - development, early, 33
 - development, stages, 34-38
 - doubting, 83
 - dreams and reveries, 83-84
 - emotion, 84-85
 - enthusiasm, 84-85
 - gregariousness, 90-91
 - ideals, 117
 - incorrigibility, 104-105
 - larks and adventures, 102-103
 - moral being, 98
 - organizing tendencies, 214
 - psychology as criteria, 4
 - psychology incomplete, 2-3
 - robbery, 109
 - social instincts, 89-96
- Adolescent altruism, social nature, 88-97
 - stealing, 110
 - sympathy, 91-92
 - temptations, 302-303
 - truancy, 103-104
 - visions, 117
- Adult leadership, 35-36
- Adviser for debating, 256-257
- Adviser of organizations, 223-224
- Advisory system, 173-174
- Agricultural curriculum, 205
- Allied groups of studies, 198
- Altruism, 94-95
- American high-school group, 168-176
- Anger and fighting, 106-107
- Animal kingdom and sex traits, 60-61
- Anti-social acts, 102
- Appreciation of good, 352-354
- Approbation, love of, 92-94
- Art and adolescence, 25
- Art in junior high school, 150
- Aspirations of adolescents, 117
- Assembly, 307-316
- Assembly programs, 308-311
- Assembly, a social affair, 311-313
- Athletics, 277-301
 - coaching, 289-291
 - evils, 285-288
 - faculty attitude, 277-278
 - management, 298
 - mental qualities, 282
 - moral qualities, 282-284

- Athletics, necessary, 277
 - psychology of, 278-279
 - science, 300-301
- Attitude toward life, new, 59
- Awkward age, 35
- Baseball, 294-295
- Basket-ball, 294
- Big Injun age, 7
- Blood pressure, 47-48
- Bone growth, 45-46
- Book reviews, 233-234
- Brain development, 49-50, 248
- Breathing capacity and training, 55
- Changeableness of adolescence, 29
- Character and life complex, 344
- Character forming and athletics, 279
- Character sketches, 234-235
- Charms and fetishes, 63
- Child psychology, 2
- Civics in junior high school, 149
- Club life and preadolescence, 20
- Collecting propensities of preadolescents, 9
- Commercial curriculum, 206
- Commercialization of adolescent nature, 116
- Committee of Ten, 196-197
- Concrete method in junior high school, 155
- Conference hours, 175
- Conscience, 338-339
- Constants, 203
- Coöperation in adolescents, 37-38
- Coöperation in social activities, 222-223
- Coöperation, training in, 217, 255
- Contradictory moods of adolescents, 28
- Cost of junior high school, 162-163
- Credit for debating, 263-264
- Criminals born, 101
- Criminal, meaning of, 102
- Criminal out-croppings, 100-101
- Crisis of adolescence, 31-32
- Cruelty, 107-108
- Culture, 191-192
- Culture epochs theory, 16-17
- Curriculum, 177-212
 - administration, 210
 - changes, 185
 - definitely planned, 204
 - flexibility, 209
 - general principles, 188-194
 - maker, 181-183, 210-211
 - making, 142, 178-179, 210-211
 - material, 201
 - never ideal, 180
 - rich and changing, 196
 - storm center, 177-178
 - system, 199
 - types, 205-208
- Dancing, 226-228
- Debating, 235-236, 248-267
 - clubs, programs, 259-260
 - credit, 263-264
 - dangers, 249-250, 257-258
 - interschool, 257-258, 264-267
 - instruction, 260-261
 - management, 250
 - organizations, 258-259
- Democracy, educational back-ground, 150
- Democracy, principles of, 364-365
- Development, early and rapid, 33
- Development of adolescence, stages, 34-38
- Diet and digestive troubles, 56
- Diet changes and bone growth, 54
- Doubting attitude, 83

- Dramatics, 228-230
- Dramatization, 235
- Dreams and reveries, 83-84
- Early adolescence, 34-36
 - determines junior high school, 134
- Early high schools, 168-169
- Education and social conditions, 330
- Education, new definition, 186-187
- Educational procedure determined, 1
- Eight-four plan, 128
- Elective subjects in junior high school, 150-151
- Elementary to high school, 126-127
- Elements of knowledge and pre-adolescence, 19
- Emotion and enthusiasm, 84-85
- Energy of adolescents, 22
- English in curriculum, 202
- English in junior high school, 142-144
- Enthusiasm of adolescents, 84-85
- Episcopal church and adolescence, 24-25
- Errors in studies of adolescence, 26-30
- Eugenics, 329
- Evangelical churches and adolescence, 25
- Expression, many forms, 232
- Extensive treatment in junior high school, 154
- Fads of preadolescents, 10-12
- Fair dealing, 354-355
- Fighting, 106-107
- Football, 291-293
- Foreign language curriculum, 207-208
- Formal discipline, 185-186
- Formative period, 32-33
- Freedom, 347-348, 365-367
- Functional derangements, 52-53
- Function of adolescent psychology, 3
- Functioning of senses, 66-67
- Functions of high school, 183-184
- Functions of junior high school, 165-166
- Fundamental muscles and health, 56-57
- Games for high-school boys, 291-297
- Games for preadolescents, 12-13
- Gang spirit, in preadolescents, 10-12
- Gregariousness, 90-91
- Growth of adolescents, 45-51
- Growth of high schools, 169
- Habits of enjoyment, 221
- Health and adolescence, 51-52
- Health and fundamental muscles, 56-57
- Health of preadolescents, 18
- Health, science and common-sense, 57
- Heart growth, 47-48
- Heart strain, 55
- Height during adolescence, 44-45
- Hetero-centric nature of adolescents, 89
- High school age, 37
 - group, 168-176
 - growth, 169
 - ideal for social training, 176
 - purpose of, 183-184
- History in junior high school, 149-150
- Home economics curriculum, 205-206
- Honor and "honor systems," 356-358

- Honor code of adolescents, 358-362
- Human development, 7
- Human nature, 352
- Hygiene of adolescence, 54
- Hygiene of preadolescence, 54
- Ideals of adolescents, 117
 controlled, 122
 determined by conditions, 120
 influence of age, 120
 influence of education, 121
 influence of environment, 121
 influence of sex, 121-122
 influence of social status, 120-121
 origin and meaning, 117-118
 and the will, 119-120
 and youth, 118-119
- Ideas about morality, 344
- Impulses in preadolescence, 17
- Incorrigibility, 104-105
- Independent thinking, 82
- Individual needs, 200
- Infantile love, 76
- Initiative of adolescents, 37
- Insight of preadolescents, 9
- Instincts and imagination, 338
 migratory, 64-65
 of sex long-circuited, 62-63
 shifting, 179-180
 social, 89-96
- Intellectual awakening, 81-82
- Intellectual perspective, 85
- Interschool debating, 264-267
- Journalism, 268-276
- Junior high school, 126-167
 administration, 159-164
 building, 164
 civics, 149-150
 cost, 162-163
 curriculum, 135-136
- Junior high school, curriculum
 material, 140
 definition, 133-134
 early adolescence, 36, 134-135
 efficiency, 135
 English, 142-144
 equipment, 164-165
 functions, 165-166
 fundamental propositions, 136-139
 History, 149-150
 history of, 131-133
 mathematics, 146-149
 methods, 135-136
 organization, 159-164
 program of studies, 151-152
 psychology of, 129-130
 remedy, 128-129
 science, 144-146
 social activities, 163
 subject-matter, 136
 teachers, 156-159
 text-books, 165
- Juvenile affection, 76-78
- Knighthood and adolescence, 24
- Larks and adventures, 102-103
- Late adolescence, 37-38
- Leadership of adolescents, 38
- Leadership of adults, 35-36
- Leadership, training in, 217, 254-255
- Life and sex instincts, 65
- Life characteristic of adolescence, 31
- Literary societies, 232-247
 functions, 232-233
- Literature and adolescence, 25
- Love, development of, 75-76
 final stage, 79
 infantile, 76
- Loyalty, 368-371

- Lung development, 48
- Lying, 112
 - causes and motives, 112-115
 - effects on society, 115
- Majors, 201
- Mathematics, correlated, 208
 - in junior high school, 146-149
- Manual training curriculum, 206-207
- Mechanical training and preadolescence, 19
- Membership of organizations, 230-231
- Memory of adolescent experiences, 26
- Mental dangers of adolescence, 61-62
- Mental growth and physical maturing, 58
- Mental growth, irregularity, 58-59
- Mental life and sex instincts, 61
- Mental reconstruction, 58-87
- Methods of appeal, 352-372
- Methods in junior high school, 152-153
 - suited to preadolescents, 19
- Middle adolescence, 36-37
- Migratory instincts, 64-65
- Minors, 203
- Modern high school, activities of, 221-222
- Moral aspects of adolescence, 98-125
 - atmosphere, 347
 - difference, 99-100
 - education, 335-351
 - evolution, 123
 - ideas, 344
 - instruction, dangers, 345
 - training, 219-220
- Moral aspects of adolescence, unrest and school work, 100
- Morality and adolescence, 335-336
 - in preadolescence, 14
- Morality and sex, 335
- Morals, origin of, 338
- Motor center, training, 280-281
- Motive, loyalty, 368-371
- Motives and preadolescence, 16
- Muscle growth, 46-47
- Music in junior high school, 150
- Nature and adolescence, 72
- Nature's appeal to preadolescence, 18-19
- Nature of high-school group, 168-176
- Nerve development, 50-51
- New birth idea, 30-31
- New subjects, 186
- New York high schools, 170
- Novelists' use of sex charms, 63-64
- Obedience and preadolescence, 21
- Organizations of junior high school, 159-164
- Organizations of preadolescents, 13
- Organizing tendencies of adolescents, 214
- Parliamentary law, 236
- Perception in preadolescence, 8
- Period of withdrawal, 78-79
- Personal freedom, 123-124
 - influence, 124-125
 - life, 340-341
- Personality and adolescence, 32-33, 96
- Personality in preadolescence, 15
- Personality, physical center of, 98-99

- Petty larceny, 110-111
- Physical basis of new thoughts, 82
 center of personality, 98-99
 characteristics of preadolescents, 8
 growth, inferences, 53-57
 maturing and mental life, 58
 training, 208
 training in junior high school, 150
- Physiological age, 41
 causes of moral differences, 99-100
 changes, 40-57
- Pleasure, 220
- Poetical awakening, 72
- Preadolescence, 7-21
 and boy life, 20
 introduction to adolescence, 7
- Preadolescent desire for facts, 9
 games, 12-13
 health, 18
 impulses, 17
 indifference to sex, 13-14
 knowledge without content, 9
 morality, 14
 non-social nature, 13
 obedience, 21
 organizations, 13
 perception, 8
 personality, 15
 religion, 15
 savagery, 15
 self-assertion, 14
 sex education, 323
 social characteristics, 10
 sympathy, 15
 traits appear in adolescence, 21
 truthfulness, 21
- Primitive peoples and adolescence, 23
- Principles of appeal, 352-371
- Principles of curriculum making, 188-194
- Program of studies in junior high school, 151-152
- Proof, meaning of, 252-253
- Psychic growth and brain development, 51
- Psychological age, 41
- Psychological aspects of morality, 337-338
 solution of problems, 1-2
- Psychology of adolescence, 2-3, 22-125
- Puberty, 40-41
- Puberty, age of, 41-43
- Public speaking, 208
 "briefs," 245-246
 subjects, 239-243
- Punishments, 348-349
- Pupil finance, 302-306
- Questionnaire method and adolescence, 29-30
- Railroads and the adolescent, 108-109
- Reason exercised in debate, 250-251
- Reason in preadolescence, 9
- Rebuttal in debate, 261-263
- Recapitulation theory, 16-17
- Recreation, 220
- Rectitude, 338-339
- Religion in preadolescence, 15
- Romans and adolescence, 24
- Rules, 347-348
- School paper, 268-276
 faculty adviser, 275
 functions of, 269-270
 management, 273-275
 problems, 270-271

- School paper, responsibility, 276
 staff, 271-272
- School studies, 349-351
- Science in curriculum, 209
 in junior high school, 144-146
- Secretiveness of adolescents, 27
- Self-assertion of preadolescents, 14
- Sense development in adolescence, 66-75
- Sense functions change, 66-67
- Sequential group, 198
- Sex central factor in adolescence, 317
- Sex characters, primary and secondary, 60
 charms and fetishes, 63-64
 education, 317-334
 education, emphasis in, 319-320
 dangers, 318
 information needed, 325-328
 method of approach, 318-319
 method of teaching, 331-332
 functions, maturing of, 40
 instincts and life, 65
 instincts and mental life, 61
 instincts long-circuited, 62-63
- Sex and morality, 335
 in preadolescence, 13-14
- Sexual life, change to, 59-60
- Short stories, 234
- Significance of adolescence, 22
- Signs of adolescence, 43-44
- Sin and virtue, struggle, 122-123
- Smell and adolescence, 70
- Soccer, 293-294
- Social activities, 213-231
 credits, 231
 functions of, 213
 of junior high school, 163
- Social administration, 5
 aspects of morality, 337-338
- Social administration, character-
 istics of adolescents, 88-97
 characteristics of preadolescents,
 10
 conformity, 96-97
 education, 213-214
 efficiency, 96
 environment dominant, 88
 heritage, 96
 instincts, 89-96, 216
 needs, 200
 organizations, faculty attitudes,
 214-216
 organizations, number and kind,
 224-225
 psychological treatment, 345-346
 status in high schools, 171
 training in high school, 176
- Sociological solution of problems,
 1-2
- Sounds in nature, 72
- Speaking, extemporaneous, 236-246
- Spiritual gifts, 341-342
- Stages of adolescent development,
 34-38
- Stealing within family, 110
- Stimulation, susceptibility to, 53-54
- Stimuli, responses to change, 73-74
- Stories and preadolescents, 18
- Study of adolescence, 39
- Studies, influence of, 349-351
- Subconscious self, 341
- Suggestive methods with adoles-
 cents, 85-87
- Supervised study, 175-176
- Sympathy, 91-92
- Sympathy in preadolescence, 15
- Tastes and adolescence, 68-70
- Teachers in junior high schools, 156-
 159

- Teaching of morality, 335-337
 Tennis, 296-297
 Text-books for junior high schools, 165
 Thinking, training in, 255-256
 Thought processes, physical basis, 82
 Thought, realm of, 79-80
 Touch and adolescence, 67-68
 Track events, 295-296
 Training in fair play, 253-254
 Training in initiative, 251-252
 Truancy and running away, 103-104
 Truthfulness and preadolescence, 21
 Twofold life of preadolescent, 20
 Understanding of youth needed, 4
 Unity of individual, 262-264
 Unresponsive period, 80
 Upper grades and subject-matter, 140-141
 Utility, 191-192
 Values determined, 194-195
 Variability in maturing, 41
 Verbal contest, 248
 Vision during adolescence, 72-73
 Visual imagination of preadolescents, 9
 Voice, care of, 55-56
 Voice changes, 49
 Vocal consciousness, new, 70-71
 Vocational expectation of pupils, 171-172
 Weight during adolescence, 44-45

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